Installation Guide

XEROX
DocuShare®

Release 3.1

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Welcome to DocuShare

DocuShare is a web-based document management application that enables workgroups and document intensive businesses to dynamically capture, manage, retrieve, and distribute information. With DocuShare, users can create their own accounts and add or delete information without a webmaster or site administrator.

This chapter contains the following:

About DocuShare

DocuShare is a web-based document management application that stores information organized in folders called collections. Collections can contain other DocuShare objects such as files, calendars, bulletin boards, URLs, and other collections. Any of these DocuShare objects can appear in mutliple collections at once and can be quickly located by using the various DocuShare navigation and search features.

Server types

DocuShare can be installed on the following platforms:

- Windows NT Server 4.0 (SP6a) using the IIS 4 http server
- Windows 2000 Server (SP1) using the IIS 5 http server
- Windows 2000 or NT Server using the Apache http server
- Sun Solaris
- Linux

DocuShare client requirements

Once DocuShare is installed on a networked server, users can access the shared information from any web browser equipped client workstation with access to the network server. Web browsers that are supported:

- Netscape Communicator 4.7 or higher
- Internet Explorer 4.x or higher

With DocuShare Windows Client software or the optional DocuShare Outlook Client software, DocuShare can be accessed with Windows Explorer or Microsoft Outlook.

Licensing

DocuShare is distributed as a restricted use evaluation server. A 30-day license is required for the evaluation period and can be obtained at http://docushare.xerox.com/ds30/ds30-trial.htm.

If you have purchased DocuShare, you can disable the 30-day restriction by acquiring a DocuShare license.

United States and Canada

To obtain a DocuShare license, login as a DocuShare administrator and obtain the DocuShare Server ID from the Site Management/Server License Management page. Email the Server ID along with the number of seats and your customer information to the Xerox Teleweb Center at osbuorders@can.xerox.com or call 1-800-428-2995 and a DocuShare license will be generated and sent to you.

NOTE: Due to the length of the new licensing strings, licenses can only be emailed to customers.

Europe

To obtain a DocuShare license, login as a DocuShare administrator and obtain the DocuShare Server ID from the Site Management/Server License Management page. Send your Server ID and customer information to your local Xerox DocuShare reseller or distributor. The Xerox License Administrator will email your DocuShare license via your local Xerox DocuShare reseller or distributor.

Asia Pacific

To obtain a DocuShare license, login as a DocuShare administrator and obtain the DocuShare Server ID from the Site Management/Server License Management page. Send your Server ID and customer information to your local Xerox DocuShare reseller or distributor. The Xerox License Administrator will email your DocuShare license via your local Xerox DocuShare reseller or distributor.

Other Regions

To obtain a DocuShare license, login as a DocuShare administrator and obtain the DocuShare Server ID from the Site Management/Server License Management page. Send your Server ID and customer information to your local Xerox DocuShare reseller or distributor. The Xerox License Administrator will email your DocuShare license via your local Xerox DocuShare reseller or distributor.

Support

Xerox offers installation and technical phone support to DocuShare customers at no additional cost for 30 days from installation. The DocuShare Web site at http://docushare.xerox.com provides online support information, current information about updates, and other resources available for download.

If you require technical assistance installing or using DocuShare:

- For the U.S., contact the Xerox Customer Support team through the web site, call 1-800-835-9013, or visit http://docushare.xerox.com/support.html.

  Customer Support representatives are available Monday through Friday from 9 AM-7 PM, Eastern Time.

- For Canada, call 1-800-93-XEROX or visit the web site at http://www.xerox.ca.
- For Europe, contact your local Xerox DocuShare reseller or distributor for support or go to the DocuShare Web site at http://docushare.xerox.com/support.html for support information.
- For other regions, contact your local Xerox DocuShare reseller or distributor for support or go to the DocuShare Web site at http://docushare.xerox.com/support.html for support information.

Additional resources

In addition to the online help, the following information is available to help you work with DocuShare 3.x.

Resource Name	Description
DocuShare User Tutorial	Provides brief overviews and procedures on DocuShare basic functions—available online in HTML from the DocuShare **Help** page.
DocuShare Administrator Tutorial	Provides brief overviews and procedures on DocuShare basic administrative functions—available online in HTML from the DocuShare Administration **Help** page.
DocuShare User Guide	Provides in-depth description of all DocuShare features—available online in HTML and PDF formats from the DocuShare **Help** page.
DocuShare Administrator Guide	Provides in-depth description of all DocuShare administrator functions—available online in HTML and PDF from the DocuShare Administration **Help** page.
VDF Reference Guide	Provides the template building mechanism to customize the DocuShare web page—available in PDF from the DocuShare Administration **Help** page.
Command Line Utilities Guide	Provides information for using the command line interface to administer DocuShare object and server properties—available in PDF from the DocuShare Administration **Help** page.
LDAP and Active Directory Guide	Provides information to administer LDAP and Active Directory specific to the DocuShare server—available in PDF from the DocuShare Administration **Help** page.
DocuShare 3.x Release Notes	Describes features and known problems with this release. On the server home page, click **About DocuShare** and click **Release Notes**.

2

Windows Server Installation

This chapter contains the following:

Preparing to install DocuShare

The DocuShare Release 3.x server can be configured to work with several types of hardware and software. Use this pre-installation checklist to prepare your server for DocuShare installation.

System requirements

DocuShare 3.x installation on a Windows server requires the following:

- ❑ Pentium III, 1GHz or equivalent
- ❑ 600 MB free disk space or greater
- ❑ 1GB RAM or greater

Operating system

- ❑ Windows NT Server 4.0 SP 6a or higher
- ❑ Windows 2000 Server with SP4 or later
- ❑ Windows 2003 Server
- ❑ Windows Small Business Server (SBS)

Web servers

DocuShare requires a web servlet or server as part of its functionality. DocuShare includes a web servlet or can be configured to use one of the following web servers.

- ❑ Microsoft IIS 4.0, 5.0, 6.0—the web server must be installed and running before installing DocuShare.
- ❑ Apache 2.0.40—the web server must be installed and running before installing DocuShare.
- ❑ iPlanet 4.0 SP12 (Netscape)/Sun ONE 6.0 SP5—the web server must be installed and running before installing DocuShare.

NOTE: Refer to Appendix B, Web Servers for configuring one of the web servers.

Databases

DocuShare uses a database as part of its functionality. DocuShare can be configured to use MSDE, SQL Server, Oracle, and PostgreSQL databases.

- ❑ MSDE 2000 (Microsoft SQL Server Desktop Engine)—is included in the DocuShare Release 3.x installation program. If MSDE is not installed on your system, DocuShare Release 3.x installer can install MSDE 2000. Refer to the Microsoft website for the latest service packs and hot fixes for MSDE 2000 or to Support on page 1–4 for Xerox support information.

CAUTION: Do not install MSDE if an SQL Server is installed on your server. Your SQL Server data can be corrupted.

- ❑ SQL Server v.7, 2000—SQL Server must be installed and functioning (database established). You can create and define the DocuShare database or if selected, a new **Named Instance** can be created and defined by the DocuShare installer.

  To connect DocuShare to the database, obtain the following information from your database administrator before installing DocuShare.

  - Database User Name
  - Database User Password
  - Database Port
  - Tablespace Name
  - Database Host Name

  Refer to Appendix C, Databases for a typical DocuShare tablespace creation script.

  On your Windows server, set the SQLServer for **SQL Server and Windows authentication only**. DocuShare 3.x does not support **Windows only authentication** at this time.

CAUTION: Do not install SQL Server if MSDE is installed on your server. Your MSDE data can be corrupted.

- ❑ Oracle v7, v8i, v.9i—the database must be installed and functioning. You can create and define the Oracle tablespace or if selected, can be created and defined by the DocuShare installer. Oracle 9.2.0 should have the Server Patch Set 9.2.0.4 installed.

  To connect DocuShare to the database, obtain the following information from your database administrator before installing DocuShare.

  - Database User Name
  - Database User Password
  - Database Port
  - Tablespace Name
  - Database SID
  - Database Host Name

  Refer to Appendix C, Databases for a typical DocuShare tablespace creation script.

TECH NOTE: Oracle v.9i, the CLOB datatype must be **enabled** and the No Sort option **disabled** to work with DocuShare. Check the DocuShare Knowledge Base at http://www.xerox.com/docushare/support for details.

Security

Scanning

The typical DocuShare installation has Scan-to-DocuShare capability, which utilizes an FTP server port to receive documents.

CAUTION: If your environment prohibits installing an FTP server for security reasons, select the option to install DocuShare without scanning.

Secure Sockets Layer (SSL)

SSL provides a secured communication layer between the IIS web server and client web browsers. SSL functionality is provided by the web server. To achieve SSL connectivity for DocuShare, you must enable SSL for the IIS web server and shut off the Tomcat servlet port.

To enable SSL for the IIS web server, see Configuring SSL for IIS web server on page 2–21. To close the Tomcat servlet port, see Closing the Tomcat servlet port on page 2–23.

Installing DocuShare on a Windows server

1. Log into the server as a Windows server administrator.

TECH NOTE: To monitor the DocuShare installation, initial installation activity is recorded in a **log.txt** file located in the directory, C:\temp. When the DocuShare directory is created by the installer, a new log.txt file in the DocuShare home directory continues recording the remaining installation activities.

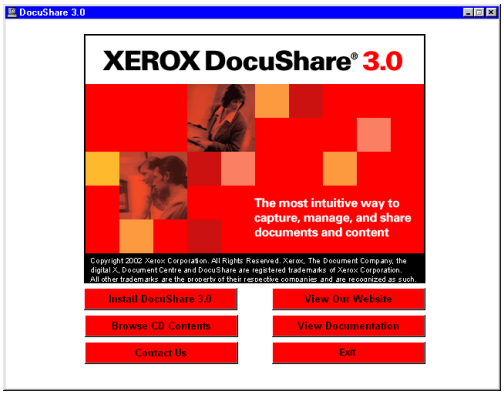
Local installation of DocuShare with MSDE is required. Windows Remote Terminal Services does not support remote MSDE installation.

2. To start the DocuShare installation.
   a. Insert the DocuShare CD-ROM into the server CD-ROM drive. The DocuShare setup should start automatically. If you have disabled AutoRun, double-click **setup.bat** in the CD root directory. The DocuShare Install Menu displays.
   b. If you downloaded DocuShare from the web into a temporary directory, to launch the installer, enter **docushare.exe** in the Run window.

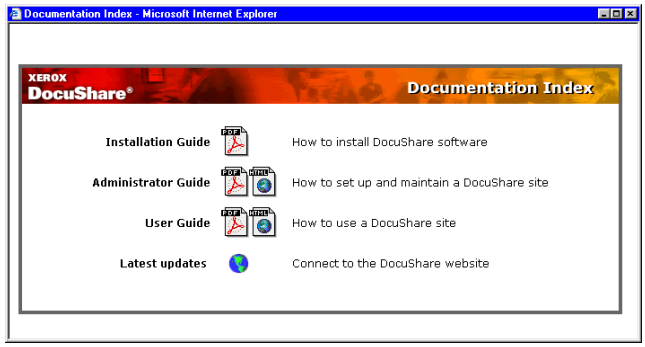
   Optional for DocuShare installation: use the command line -**P docushareLog.cleanUp=false** to preserve configuration and installation data at the completion of the DocuShare installation.

   To use this utility, start the installation in a Command window:

   docushare.exe -P docushareLog.cleanUp=false

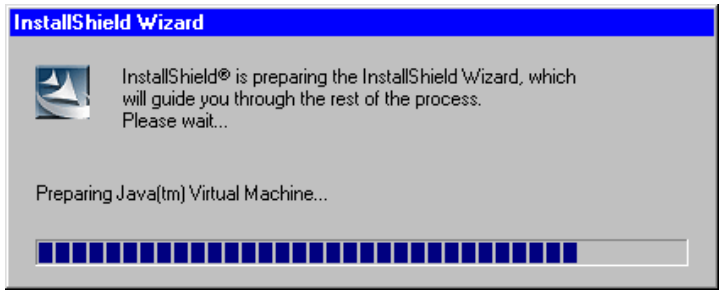


NOTE: If this is a first time DocuShare install, it is recommended that you read the *DocuShare Installation Guide* before starting the installation. Click **View Documentation** to view or print the Installation Guide from the Documentation Index page.

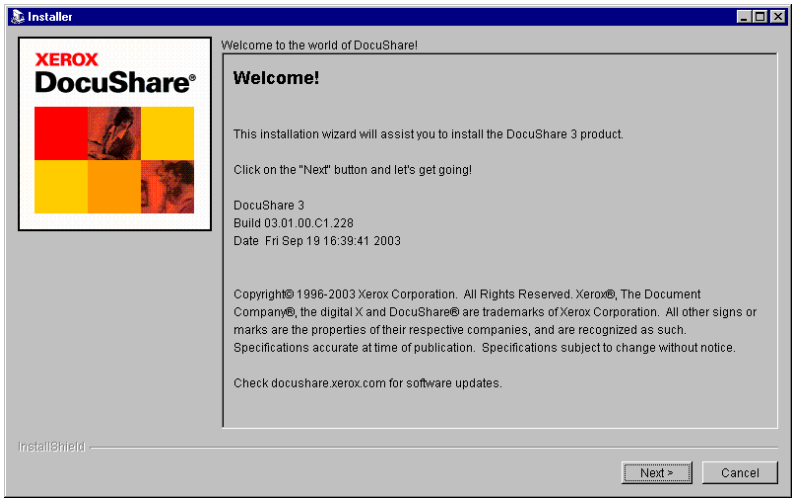


3. Click **Install DocuShare 3.0** on the DocuShare Install Menu to begin the installation.

   The installation program uses Java to install the product. It takes a few minutes to unpack and install the Java files.

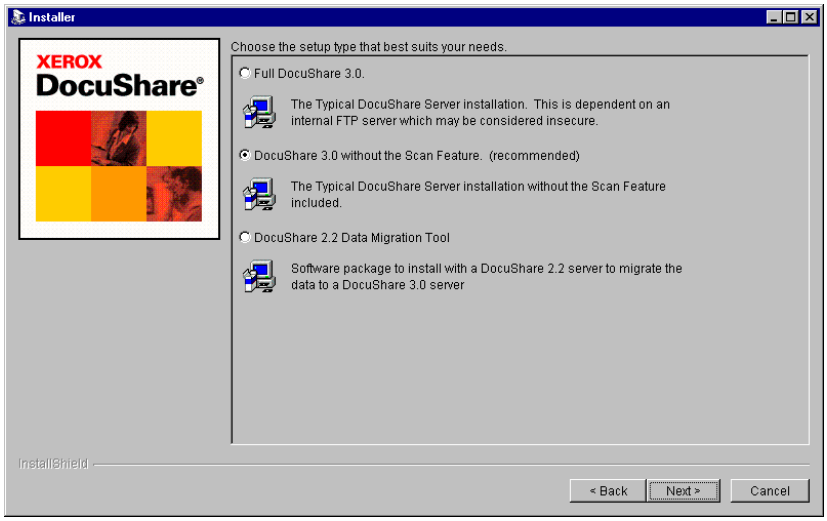


NOTE: An onscreen status indicator is not available while JVM completes its installation. The DocuShare Welcome screen displays at the completion of the Java installation.



4. Click **Next** to start the DocuShare installation. Follow the onscreen instructions.
5. When the DocuShare Installation options window displays, select the option to install DocuShare.

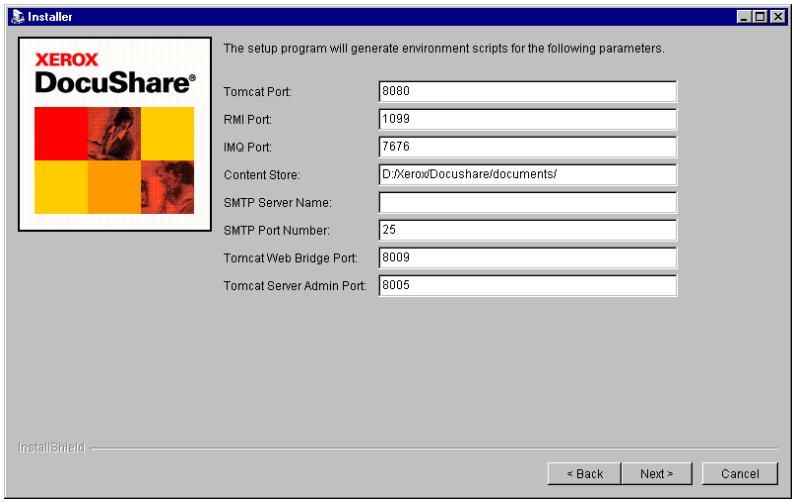
NOTE: The DocuShare 2.2 Data Migration Tool is included with the Full DocuShare 3.x and DocuShare 3.x without Scan Feature installations.



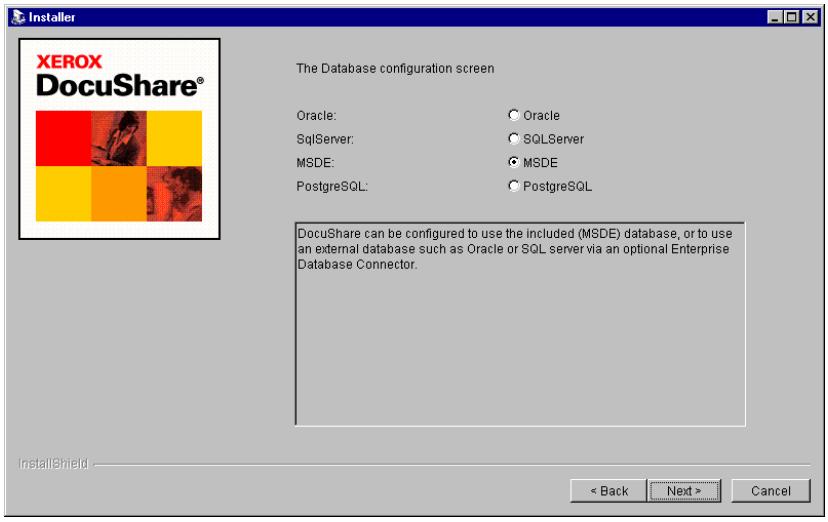
CAUTION: The full DocuShare installation has Scan-to-DocuShare capability which utilizes an FTP server port to receive documents. If your environment prohibits installing an FTP server for security reasons, select the option to install DocuShare without scanning.

6. Click **Next** and follow the onscreen instructions.
7. When the DocuShare Install Parameters window displays, make any changes to the parameters or click **Next** to accept the default settings. DocuShare requires 6 TCP ports.
   - Tomcat port—designated port for the Tomcat servlet (default port: 8080)
   - RMI port—designated port for the RMI server (default port: 1090)
   - RMI host—matches the RMI server's hostname
   - IMQ port—designated port for the IMQ JMS server port number (default port: 7676)
   - IMQ host—matches the IMQ server's hostname
   - Content store—designated directory location for document repository
   - SMTP Server Name—fully qualified DNS name for the SMTP mail server
   - SMTP Port Number—designated port for the SMTP server (default port: 25)

- Tomcat Web Bridge Port—designated port for the Tomcat Web Bridge (default port: 8009)
- Tomcat Server Admin Port—designated port for the Tomcat Web servlet (default port: 8005)

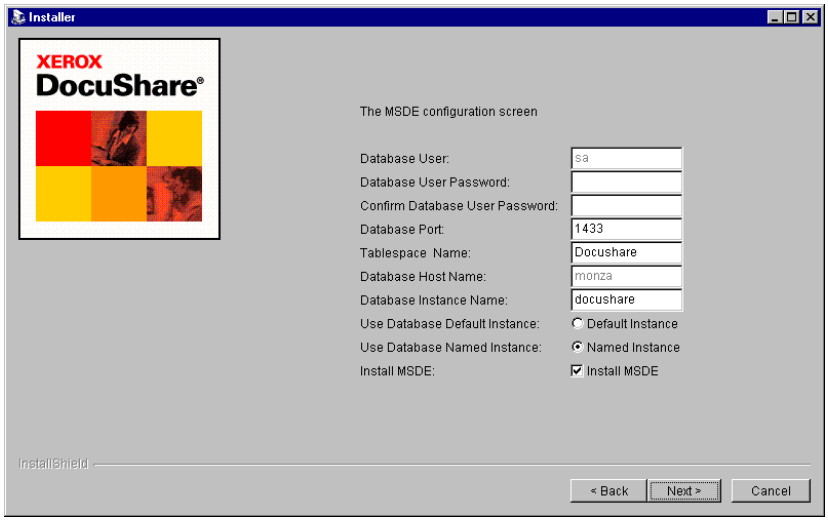


8. When the Database Configuration screen displays, select the database option for your DocuShare site and click **Next**.



9. If you are using MSDE as your DocuShare database, do the following:
   a. Enter the Database User Password (required).
   b. Click the checkbox to **Install MSDE**.
   c. Click **Next** to continue.

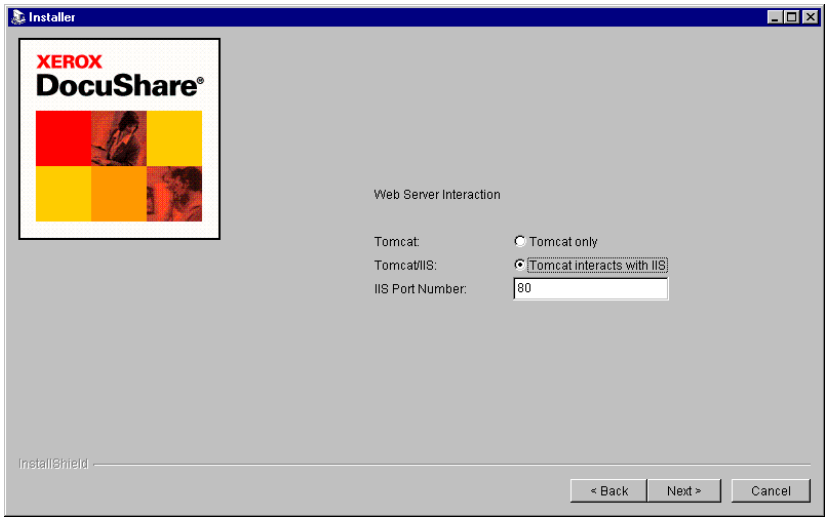
TECH NOTE: If MSDE 2000 is currently installed on the server that will be used by DocuShare, select **Default Instance** or a new **Named Instance** to be created and defined by the DocuShare installer.



10. A Reboot message displays if **Install MSDE** was selected. Click **Next** to continue.

NOTE: If an older version of MSDE exists, the DocuShare installer will upgrade to MSDE 2000 and reboot the system. At the completion of system reboot, restart the DocuShare installation.

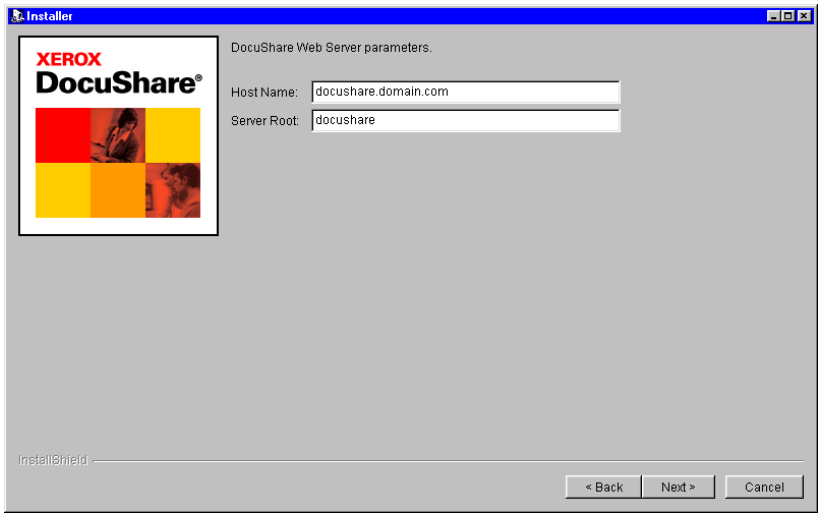
11. When the Web Server Interaction screen displays, select the web server option for your DocuShare site.



NOTE: If you are using IIS as your web server, select the option to install Tomcat/IIS web server. Running IIS on your Windows server is recommended

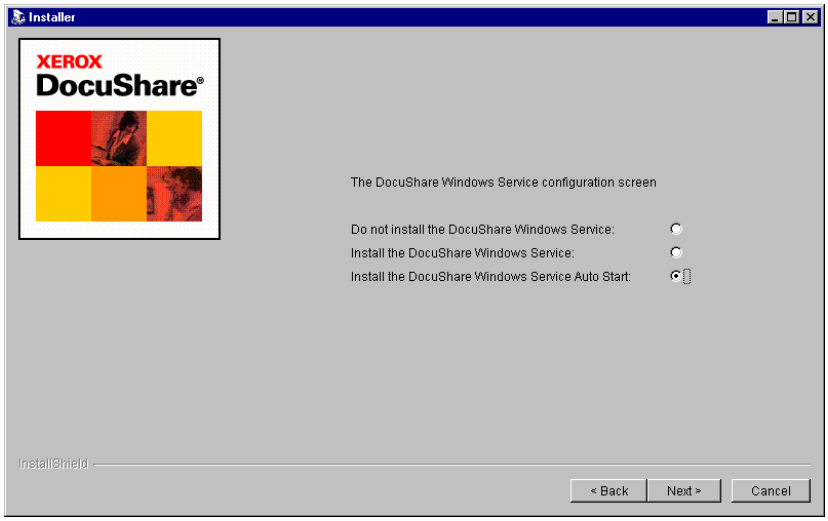
12. Click **Next** to continue.
13. When the DocuShare Web server parameters window displays:
    a. Enter the hostname (fully qualified DNS name, such as docushare.domain.com)
    b. Server root (docushare is the default).

NOTE: Refer to Connecting to your DocuShare server on page 2–27.



14. Click **Next** to continue the installation.
15. When the Windows Service setup window displays, select the option for the DocuShare Windows Service.

TECH NOTE: Running DocuShare as services on your Windows server is recommended. If you do not select to run DocuShare as a service, you must enter the command **<DSHome>\bin\start_docushare** in a command window to start DocuShare.



16. Click **Next** to continue the installation.
17. When the installer completes the DocuShare installation, click **Finish** to close the installer.

18. Reboot the system if you selected to run DocuShare as a service, otherwise enter the command **<DSHome>\bin\start_docushare** in a command window to start DocuShare; or in the Control Panel, open the Services application to select and start DocuShare.

NOTE: DocuShare initial startup automatically performs dsindexing; allow five minutes before accessing the site via a browser.

TECH NOTE: If you are using IIS as your only web server, go to Closing the Tomcat servlet port on page 2–23 to close the Tomcat servlet port.

19. To license your DocuShare server:
    a. Log into the DocuShare server as admin using the password you supplied during the installation.
    b. On the navigation bar, click **Admin Home**.
    c. From the Administration menu, click **Site Management** / **License**.
    d. Record or copy your server ID.
    e. If this installation is for evaluation, click the link or go to: http://docushare.xerox.com/ds30/ds30-trial.htm to complete the form and obtain a 30-day license.

    See Licensing on page 1–3 for details obtaining a DocuShare server site license.
20. Refer to the *DocuShare Administrator Guide* to configure your DocuShare site.

Migrating data to DocuShare 3.x

If you are upgrading from DocuShare 2.2 to DocuShare 3.x on a Windows server, the DocuShare Installer CD includes a data migration tool to transfer your 2.2 data files to your new DocuShare 3.x server. Install the migration tool on your existing DocuShare 2.2 server.

Migration overview

The migration tool copies content and metadata from a DocuShare 2.2 server (source) to a DocuShare 3.x server (target). This includes repository contents as well as object property metadata and all user and group accounts. The following is an overview for migrating data from DocuShare 2.2 to a DocuShare 3.x server:

1. Access to a licensed DocuShare 3.x server (target).

NOTE: The server must be a new install, not a previously installed 3.x server with metadata. The 3.x server must be licensed to equal or exceed the number of users for the 2.2 server.

2. Install the migration tool on the DocuShare 2.2 server (source) .

NOTE: The DocuShare server must have Service Pack 1b or higher and be set to Read-Only.

3. Migrate DocuShare data.
4. If applicable, upgrade users to DocuShare 3.x Windows Client software.
5. If applicable, merge 3.x VDF files.

Preparing to migrate data

NOTE: If source and target servers are on the same system, you only need to install DocuShare once. The DocuShare 2.2 Data Migration Tool is included with the Full DocuShare 3.x and DocuShare 3.x without Scan Feature installations.

Backup

The migration tool makes a copy of your content but does not modify the current site. It is recommended to backup the source server prior to attempting the migration.

Disk space

Migrating data requires access to adequate system disk space and virtual memory.

- Recommended free disk space for DS 2.2 data to DS 3.x migration staging.
  - **Local migration**—migrating on the same local disk: minimum free disk space is 2 times the current DS 2.2 directory size.

  - **Remote migration**—migrating from a local to a remote system: minimum free disk space is equal or greater than the DS 2.2 directory size.
- Recommended system and virtual memory requirements: the target DS 3.x system and virtual memory is equal or greater than the current DS 2.2 system.

Trashcan contents

Items in the Trashcan are not copied to the new 3.x server. Trashcan items should be **Restored** to their collections or **Expunged** prior to migrating data between the servers.

VDF files

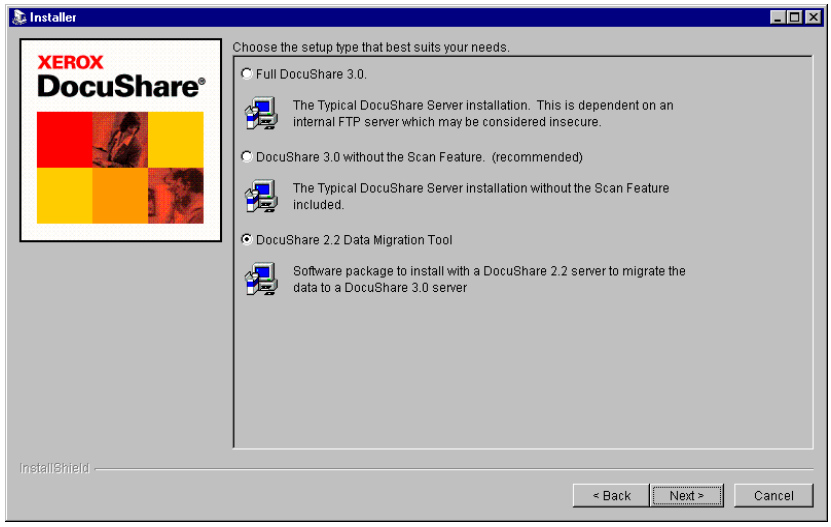
The migration tool does not migrate any customized VDF files to your DS 3.x server. The files must be merged for 3.x.

Installing the migration tool

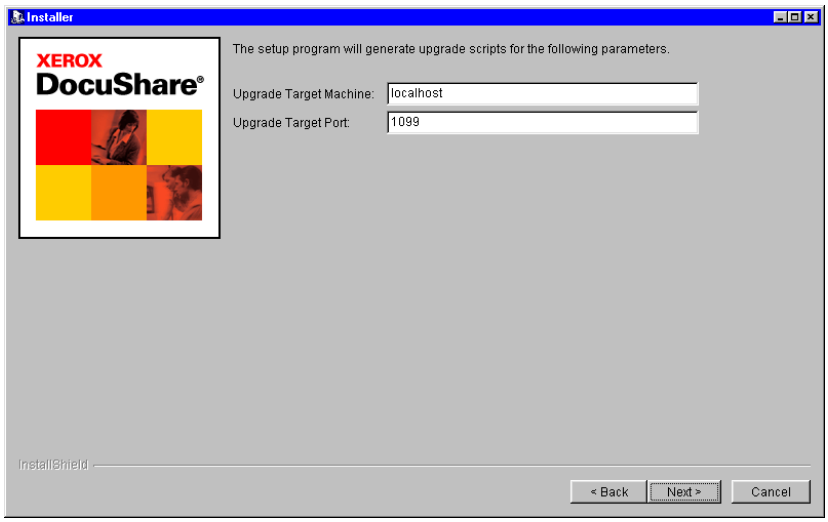
1. Log into your DocuShare 2.2 server as a Windows server administrator.
2. Disable, on the source system, any remote access applications (for example, Remote Terminal Service or PC Anywhere).
3. Insert the DocuShare CD-ROM into the server CD-ROM drive. The DocuShare setup should start automatically. If you have disabled AutoRun, double-click **setup.bat** in the CD root directory.

TECH NOTE: If you downloaded DocuShare from the web into a temporary directory, to launch the installer, enter **docushare.exe** in the Run window.

4. When the DocuShare Installation Options window displays, select the **DocuShare 2.2 Data Migration Tool** option.



5. Click **Next**. The Migration Target screen displays.



6. Enter the target hostname (fully qualified DNS name, such as localhost.xerox.com) and the port parameter. Click **Next** to continue.

TECH NOTE: The upgrade target port is the RMI port of the DocuShare 3.x server (target). The default port number is 1099.

7. When the Install Wizard completes the Migration Tool installation, click **Finish** to close the installer.

Starting the migration tool

1. Create a temporary transfer folder (for example, c:\temp).
2. Disable any virus scanning to improve throughput performance during the migration.
3. Set the source DocuShare server to Read-Only.
4. Change directory to where the DocuShare migration tool is installed (<DSHome>\bin).
5. Enter **dsupgrade2 c:\temp** in a command window to start the data migration.

   The source server starts copying the files to the temp folder. Data migration continues by exporting the files to the target server. Progress of the migration is displayed in the command window. A log file is created in the DocuShare 3.x installed directory, for example <DSHome>\logs.
6. At the completion of data migration, you are prompted to remove the temporary files. Enter **yes** to remove the files or **no** to retain the temporary copy.
7. Check the log file for any errors.

8. Perform the following database maintenance procedure. This procedure should be included in your normal database maintenance schedule.

   a. For a PostgreSQL database: **vacuumdb -d <yourdatabase> -f -z -e**.

CAUTION: To preserve your PostgreSQL indexes, do not use the PostgreSQL cluster command. Cluster will physically reorder your index information.

   b. For a SQL server database: **update statistics for query analyzer**, select 100% option.

9. Run **dsindex -a index_all** from the DocuShare 3.x server bin directory.

10. When migration completes, a Migration Status log displays.

```
06/13/03 06:16:32,625  INFO [main] Upgrader - ***
06/13/03 06:16:32,625  INFO [main] Upgrader - *** SUMMARY: ***
06/13/03 06:16:32,625  INFO [main] Upgrader -    User:      in = 368,          out = 368
06/13/03 06:16:32,625  INFO [main] Upgrader -    Group:     in = 63,           out = 63
06/13/03 06:16:32,625  INFO [main] Upgrader -    Subscription:        in = 132,          out = 132
06/13/03 06:16:32,625  INFO [main] Upgrader -    Bulletin:  in = 26,           out = 26
06/13/03 06:16:32,625  INFO [main] Upgrader -    BulletinBoard:       in = 7,    out = 7
06/13/03 06:16:32,625  INFO [main] Upgrader -    Event:     in = 617,          out = 617
06/13/03 06:16:32,625  INFO [main] Upgrader -    Calendar:          in = 2,    out = 2
06/13/03 06:16:32,625  INFO [main] Upgrader -    File:      in = 148298,       out = 147316
06/13/03 06:16:32,625  INFO [main] Upgrader -    URL:       in = 84,           out = 84
06/13/03 06:16:32,625  INFO [main] Upgrader -    SavedQuery:        in = 13,           out = 13
06/13/03 06:16:32,625  INFO [main] Upgrader -    Collection:        in = 18239,        out = 18239
06/13/03 06:16:32,625  INFO [main] Upgrader - ***
06/13/03 06:16:32,625  INFO [main] Upgrader - *** TOTAL DS2 objects processed : 167849
06/13/03 06:16:32,625  INFO [main] Upgrader - *** TOTAL DS3 objects created : 166867
06/13/03 06:16:32,625  INFO [main] Upgrader - ***
06/13/03 06:16:32,640  INFO [main] Upgrader - Total processing time = 12:31:58
```

11. Verify that all DocuShare 2.2 data has migrated to the DocuShare 3.x server. Compare the Migration Status log with the About Statistics on the DocuShare 2.2 server.

    If there are significant differences in the migration statistics, it is possible that Trashcan contents were not expunged or restored prior to starting migration. Refer to Trashcan contents on page 2–14.

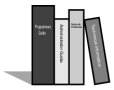
12. Reboot the server.

TECH NOTE: If Summary and Keyword fields contain more than 256 characters, the DocuShare 3.x Migration Tool leaves the fields empty after migration from DocuShare 2.2. The problem value and the original value are logged into the upgrader2.log file. The field values must be corrected to 256 characters or less.

13. Configure your DocuShare 3.x server.

NOTE: The migration tool does not copy your DocuShare 2.2 system configuration to the new 3.x server. System configuration must be manually changed on the DocuShare 3.x server Home site. Refer to the *DocuShare Administrator Guide* to configure your DocuShare 3.x server.

14. If applicable, upgrade users to DocuShare 3.x Windows Client software. Previous versions of Windows Client cannot map to the DocuShare 3.x server.
15. If applicable, merge your 3.x VDF templates.



RESOURCES: To merge VDF templates, refer to the *VDF Reference Guide,* available from the Developer Tools tab on the Administrator Help Desk.

Upgrading DocuShare 3.0

If you are upgrading DocuShare 3.0 to DocuShare 3.x, the DocuShare Installer includes an upgrade utility. You can upgrade your DocuShare 3.0 server to DocuShare 3.x using the DocuShare 3.x Installer CD or from the DocuShare 3.x application downloaded from the web.

NOTE: The DocuShare upgrade utility upgrades DocuShare 3.00.00 or a later version. To check your DocuShare version, click **About DocuShare** on the Home page.

To monitor the DocuShare upgrade, installation and upgrade activity is recorded in a **log.txt** file located in the DocuShare home directory.

To upgrade DocuShare 3.0:

1. Log into the server as a Windows server administrator.
2. In the Control Panel, select and open the Services application.
3. Select **DocuShare** to stop the server. Do not stop the database; the database must be running for the DocuShare Installer to upgrade the database schema.
4. To ensure the security of your DocuShare site data, backup your database. Refer to *Chapter 3, DocuShare Administrator Guide* or to your database server documentation, for data backup and restore procedures.
5. Exit all Windows applications before starting the DocuShare Installer Setup.

CAUTION: The DocuShare Installer will shutdown the IIS service during the upgrade and restart at its completion. If IIS service is not restarted by the DocuShare Installer, enter in a command window: net start w3svc.

6. To start the DocuShare upgrade.
   a. Insert the DocuShare CD-ROM into the server CD-ROM drive. The DocuShare setup should start automatically. If you have disabled AutoRun, double-click **setup.bat** in the CD root directory. The DocuShare Install Menu displays.
   b. If you downloaded DocuShare from the web into a temporary directory, to launch the installer, enter **docushare.exe** in the Run window.

   Optional for DocuShare upgrade: use the command line -**P docushareLog.cleanUp=false** to preserve configuration and upgrade data at the completion of the DocuShare upgrade.

   To use this utility, start the upgrade in a Command window:

   docushare.exe -P docushareLog.cleanUp=false

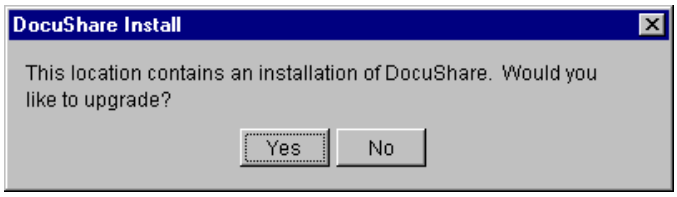
7. Click **Install DocuShare** on the DocuShare Install Menu to begin the installation.

   The installation program uses Java to install the product. It takes a few minutes to unpack and install the Java files. Click **Next** to start the DocuShare installation and follow the onscreen instructions.

8. When the DocuShare Installation options window displays, select the option to install DocuShare.

CAUTION: The full DocuShare installation has Scan-to-DocuShare capability which utilizes an FTP server port to receive documents. If your environment prohibits installing an FTP server for security reasons, select the option to install DocuShare without scanning.

9. Click **Next** and follow the onscreen instructions.
10. When the Upgrade Option window displays, click **Yes** to upgrade your server.



11. Follow the onscreen instructions to continue the upgrade. During the upgrade process, the DocuShare upgrade utility backs up the appropriate system server configuration and data.
12. When the installer completes the DocuShare upgrade, click **Finish** to close the installer.
13. Reboot the system if you selected to run DocuShare as a service, otherwise enter the command **<DSHome>\bin\start_docushare** in a command window to start DocuShare; or in the Control Panel, open the Services application to select and start DocuShare.
14. Perform the following database maintenance procedure. This procedure should be part of your normal database maintenance schedule.
    a. For a PostgreSQL database: **vacuumdb -d <yourdatabase> -f -z -e**.

CAUTION: To preserve your PostgreSQL indexes, do not use the PostgreSQL cluster command. Cluster will physically reorder your index information.

    b. For a SQL server database: **update statistics for query analyzer**, select 100% option.
15. Run **dsindex index_all** from the DocuShare 3.x server bin directory.

Uninstalling DocuShare

To uninstall DocuShare 3.x from your Windows NT, 2000, or 2003 server, use the Add/Remove application in the server Control Panel. Uninstall will not remove the DocuShare directory that includes your DocuShare repository content. You can do the following before uninstalling DocuShare.

- Leave the repository in its current location.
- Save your repository content to another storage media by using the DocuShare command line utility, **dsexport**, prior to uninstalling DocuShare. Refer to the *DocuShare Command Line Utilities Guide* for details.

CAUTION: If MSDE 2000 (Microsoft SQL Server Desktop Engine) was installed with the DocuShare Installer, DocuShare Uninstaller will remove DocuShare and MDSE 2000. Data for all Windows applications sharing the MSDE 2000 database should be backed up.

To uninstall DocuShare:

1. In the Control Panel, select and open the Services application.
2. Select **DocuShare** to stop the server.
3. In the Control Panel, select and open the server Add/Remove application.
4. Scroll and select **DocuShare** to uninstall the program. Follow the onscreen instructions.
5. Delete the directory in which DocuShare was installed.

NOTE: Uninstall removes all installed languages, such as French, German, and Spanish.

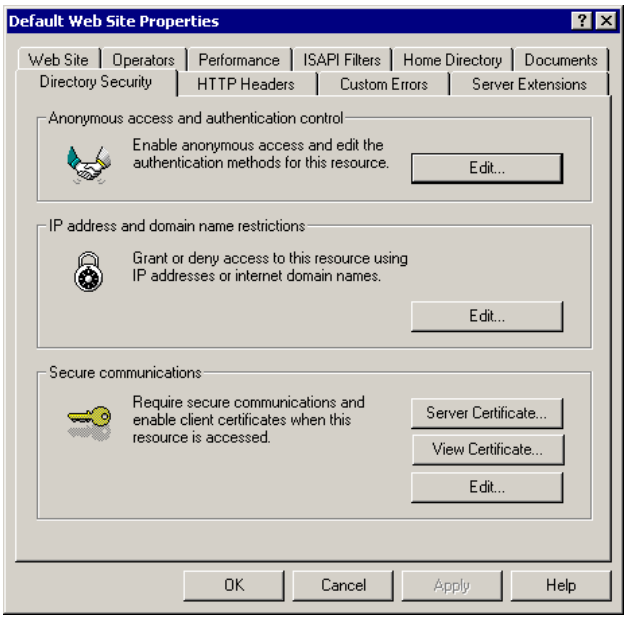
Configuring SSL for IIS web server

Secure Sockets Layer (SSL) provides an encrypted communication layer between your web server and client web browsers. DocuShare supports SSL when used with the IIS server. SSL functionality is provided by your web server, but DocuShare must be informed that SSL is being used so that it will supply SSL-based addresses (https:// instead of http://). SSL may be enabled or disabled anytime after DocuShare has been installed.

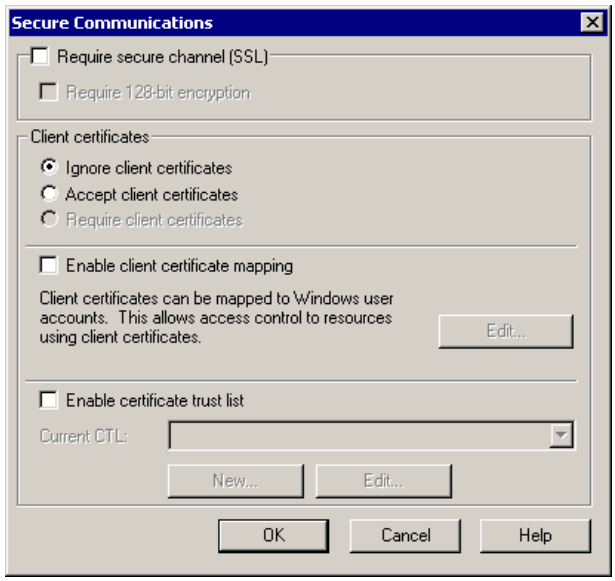
To configure SSL:

NOTE: The following procedure and screens are for a Windows 2000 server. The procedure and screens will vary for an NT4.0 server.

1. From the Start menu, select **Internet Information Manager**.
2. In the Internet Information Manager window, right-click the **Default Web Site** and select **Properties**. The Default Web Site Properties window displays.



3. Click the **Directory Security** tab.
4. Click **Edit** in the Secure Communications section. The Secure Communications window displays.



5. Click the **Ignore client certificates** option.

TECH NOTE: If **Require secure channel (SSL)** is not checked, the DocuShare site can be accessed in a non-secured mode.

6. Click **OK**. SSL is now configured for the IIS web server.

Closing the Tomcat servlet port

During the DocuShare 3.x installation, if you selected to install the IIS option on the Web Server Interaction page, you can configure your DocuShare server for SSL by closing the Tomcat web servlet port to web browser access.

To close the Tomcat servlet port:

1. In a command window, check the Tomcat servlet port status using the command, **dsservice status** in the directory <DSHome>\bin.
2. Stop DocuShare by entering the command, **stop_docushare**.

RESOURCES: For a complete list of start_docushare commands and arguments, enter **start_docushare help** in the command window.

3. Enter the command, **start_docushare tomcat http off**, to close the Tomcat web servlet http port. This action closes the port providing access to the Tomcat web servlet via a web browser.
4. Enter the command, **start_docushare tomcat http on**, to open the port to the Tomcat web servlet. This action allows access to the Tomcat web servlet.

NOTE: To update only the environment, add the argument **update-only** to the end of the start_docushare command.

5. Start DocuShare by entering the command, **start_docushare**. Reboot the system if you are using IIS as a service.

Configuring for auto login

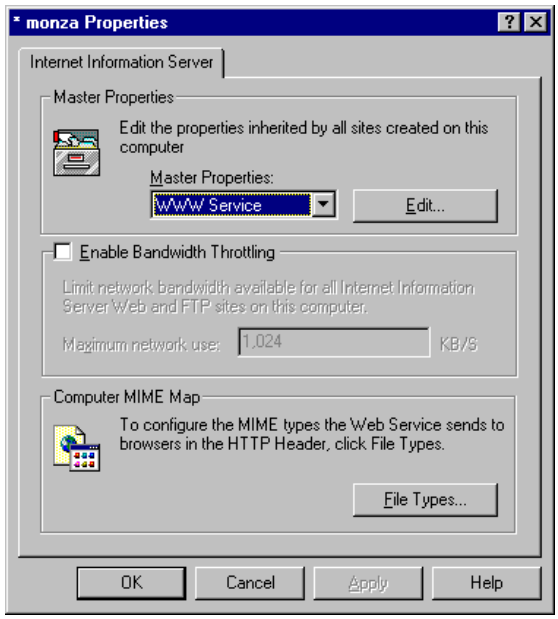
If you are enabling the DocuShare Auto Login feature to allow DocuShare Login Authentication to be handled by the Windows Domain Authentication, you must have the Internet Information Server (IIS) web server installed and configured to use with DocuShare.

NOTE: Ensure that the DocuShare server usernames and passwords are the same as authenticated by the web server.

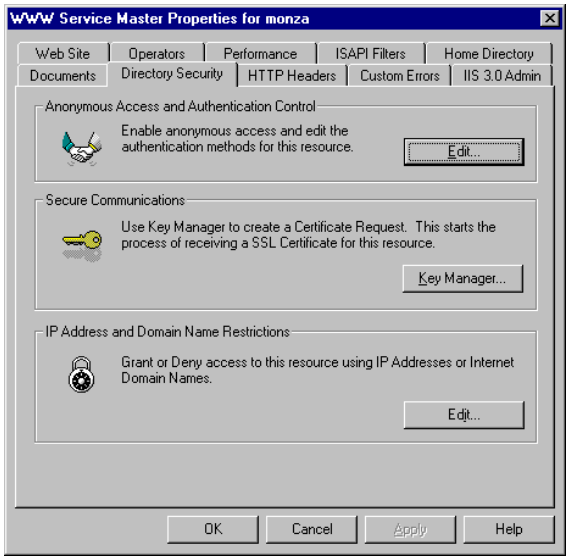
To configure IIS for DocuShare Auto Login:

NOTE: The following procedure and screens are for an NT4.0 server. The procedure and screens will vary for a Windows 2000 server.

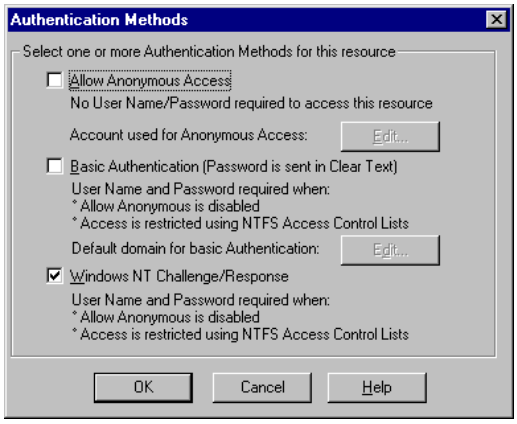
1. From the Start menu, select **Internet Information Manager**.
2. Stop the IIS web server. Right-click the IIS Server and select **Stop**.
3. In the Microsoft Management Console window, right-click the DocuShare host server and select **Properties**. The host server Properties window displays.



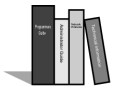
4. Click **Edit** for Master Properties. The WWW Service Master Properties window displays.



5. Click the **Directory Security** tab.
6. Click **Edit** for Anonymous Access and Authentication Control. The Authentication Methods window displays.



   a. Disable **Allow Anonymous Access**.
   b. Enable **Windows NT Challenge/Response**.
   c. Click **OK**.
7. Start the IIS web site.
8. Enable the Auto Login feature on DocuShare.



RESOURCES: Refer to the Getting Started chapter of the *Administrator Guide* to enable auto login.

TECH NOTE: It is also possible to use auto login with a customized web server other than IIS. The web server must be configured to set the REMOTE_USER environment variable to the username of the user it has authenticated as follows:
REMOTE_USER = <Domain>/<username>

Connecting to your DocuShare server

At the completion of the DocuShare installation, try connecting to your new DocuShare server using a web browser. The default URL is http://<fully qualified DNS name>:8080/docushare.

A. If DocuShare was installed to the home directory on your web site, the URL is: http://<fully qualified DNS name>:<port>/docushare

B. If DocuShare was installed into a subdirectory on your web site, the URL is: http://<fully qualified DNS name>:<port>/<subdirectory_path>/docushare

- If you specified to install IIS on your server, then the :<port> component of the URL is not used. For example: http://<fully qualified DNS name>/docushare
- If you specified to install only Tomcat on your server, then the :<port> component of the URL is 8080 (default).

C. If you changed the server root to **root** during the installation, the /docushare (default) component of the URL is not required. For example, http://<fully qualified DNS name> or http://<fully qualified DNS name>:8080

If the installation was successful, you should be viewing the default home page of your new DocuShare server. The home page has links to many useful features and to several pre-installed collections.

DocuShare login

You can log in as **admin** at this time, using the password you created during the installation. You need to license the server to enable creating collections and adding documents to your server.

Account Creation Authority is the default allowing all users to access the site and create their own user accounts. Site access can be configured for limited or restricted access. Refer to the Account Management/Access Policies section in the *DocuShare Administrator Guide*.

RESOURCES: Take a moment to scan the *DocuShare User* and *Administrator Tutorials* that are included on the DocuShare Help page to familiarize yourself with DocuShare features and administration.

3

Solaris/Linux Server Installation

This chapter contains the following:

Preparing to install DocuShare

The DocuShare Release 3.x server can be configured to work with several types of hardware and software. Use this pre-installation checklist to prepare your server for DocuShare installation.

System requirements

DocuShare 3.x installation on a Solaris/Linux server requires the following:

- ❑ Solaris—Sun UltraSparc II
- ❑ Linux—Pentium III, 1GHz or equivalent
- ❑ 600 MB free disk space or greater
- ❑ 1 GB RAM or greater

Operating systems

- ❑ Solaris—Sun Solaris 7, 8, and 9
- ❑ Linux—Redhat 7.1, 7.2, 7.3, and 8

Web servers

DocuShare requires a web servlet or server as part of its functionality. DocuShare can be configured to use one of the following web servers.

- ❑ Apache 1.3.27 and 2.0.47—the web server must be installed and running before installing DocuShare. A version of Apache is included in a separate directory within the DocuShare **ds-linux-3.x.tar.gz** file or **ds-solaris-3.x.tar** file.
- ❑ iPlanet 4.1 SP12 (Netscape)/Sun ONE 6.0 SP5—the web server must be installed and running before installing DocuShare.

NOTE: Refer to Appendix B, Web Servers for configuring one of the web servers.

Databases

DocuShare uses a database as part of its functionality. DocuShare can be configured to use PostgreSQL, SQL Server, and Oracle databases.

- ❑ PostgreSQL—the database must be installed and functioning. You can create and define the DocuShare database or if selected, a new Named Instance can be created and defined by the DocuShare installer. A version of PostgreSQL is included in a separate directory within the DocuShare **ds-linux-3.x.tar.gz** file or **ds-solaris-3.x.tar** file. Refer to Appendix C, Databases for configuring PostgreSQL for DocuShare.
- ❑ SQL Server v.8—SQL Server must be installed and functioning (database established). You can create and define the DocuShare database or if selected, a new **Named Instance** can be created and defined by the DocuShare installer.

To connect DocuShare to the database, obtain the following information from your database administrator before installing DocuShare.

- Database User Name
- Database User Password
- Database Port
- Tablespace Name
- Database Host Name

Refer to Appendix C, Databases for a typical DocuShare tablespace creation script.

❑ Oracle v8i, v.9i—the database must be installed and functioning. You can create and define the Oracle tablespace or if selected, can be created and defined by the DocuShare installer. Oracle 9.2.0 should have the Server Patch Set 9.2.0.4 installed.

To connect DocuShare to the database, obtain the following information from your database administrator before installing DocuShare.

- Database User Name
- Database User Password
- Database Port
- Tablespace Name
- Database SID
- Database Host Name

Refer to Appendix C, Databases for a typical DocuShare tablespace creation script.

TECH NOTE: Oracle v.9i, the CLOB datatype must be **enabled** and the No Sort option **disabled** to work with DocuShare. Check the DocuShare Knowledge Base at http://www.xerox.com/docushare/support for details.

Security

Scanning

The typical DocuShare installation has Scan-to-DocuShare capability which utilizes an FTP server port to receive documents.

CAUTION: If your environment prohibits installing an FTP server for security reasons, select the option to install DocuShare without scanning.

Secure Sockets Layer (SSL)

SSL provides a secured communication layer between the Apache web server and client web browsers. SSL functionality is provided by the Apache web server. To achieve SSL connectivity for DocuShare, you must close the Tomcat servlet port. See Closing the Tomcat servlet port on page 3–20.

Installing DocuShare on a Solaris or Linux server

If this is a first time DocuShare install, it is recommended that you read the *DocuShare Installation Guide* before starting the installation. Go to the DocuShare **/doc/install/pdf** directory on the CD-ROM to view or print the Installation Guide (PDF).

DocuShare download files

If you downloaded the **ds-linux-3.x.tar.gz file** or **ds-solaris-3.x.tar** file into a temporary directory, you need to extract the DocuShare directory files before launching the installer. Follow the instructions to unzip or untar the file.

Linux gz file

1. Unzip the file, **gunzip ds-linux-3.x.tar.gz**.
2. Extract the unzipped tar file, **tar -xvf ds-linux-3.x.tar** to a temporary directory.

Solaris tar file

If you downloaded **ds-solaris-3.x.tar**, extract the tar file, **tar -xvf ds-solaris-3.x.tar** to a temporary directory.

Installing DocuShare

TECH NOTE: A database must be installed and functioning, otherwise the DocuShare installation will fail. See Databases on page 3–2.

1. Log into the server as a UNIX server administrator (root).

TECH NOTE: To monitor the DocuShare installation, initial installation activity is recorded in a **log.txt** file located in the root directory. When the DocuShare directory is created by the installer, a new log.txt file in the DocuShare home directory continues recording the remaining installation activities.

2. Insert the DocuShare CD-ROM into the server CD-ROM drive. If necessary, mount the cd as root.

NOTE: Refer to your Linux or Solaris documentation for mounting the CD-ROM drive.

3. To start the DocuShare installation.

   a. Double-click **docushare** in the CD-ROM root directory to start the installation.

   b. If you had downloaded DocuShare from the web and extracted the executable from the gz (Linux) or tar (Solaris) file, cd to **<DSHome>/bin** and enter **./docushare.sh**.

   Optional for DocuShare installation: use the command line -**P docushareLog.cleanUp=false** to preserve configuration and installation data at the completion of the DocuShare installation.

   To use this utility, start the installation in a console window:

   ./docushare.sh -P docushareLog.cleanUp=false

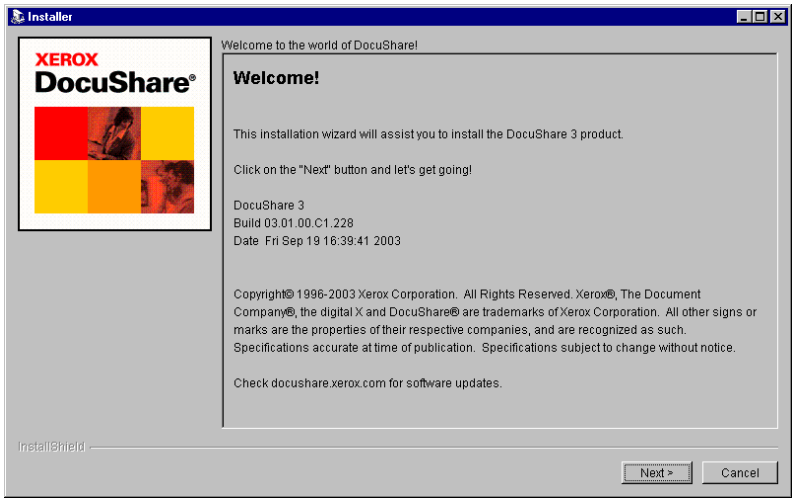
4. The installation program uses Java to install the product. It takes a few minutes to unpack and install the Java files.

```
# ./docushare
InstallShield Wizard

Initializing InstallShield Wizard...

Preparing Java(tm) Virtual Machine...
.................................
.................................
.......
```

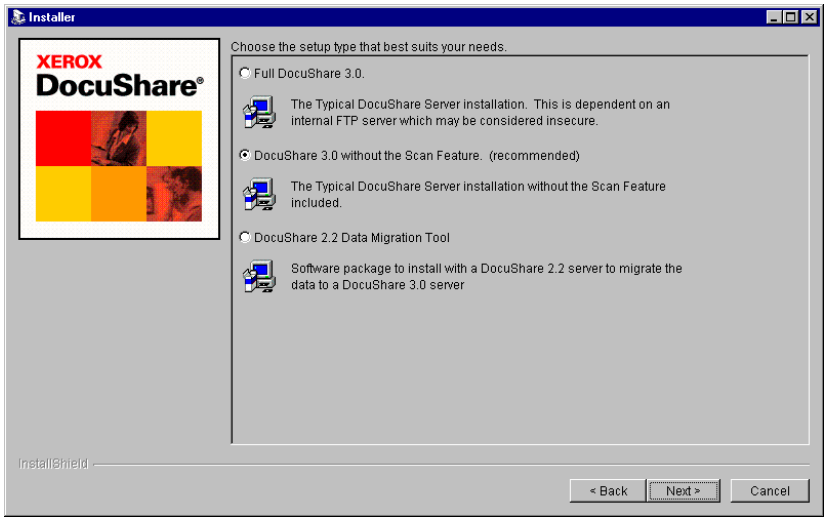
5. The DocuShare Welcome screen displays at the completion of the Java installation.



6. Click **Next** to start the DocuShare installation. Follow the onscreen instructions.

7. When the DocuShare Installation options window displays, select the option to install DocuShare.

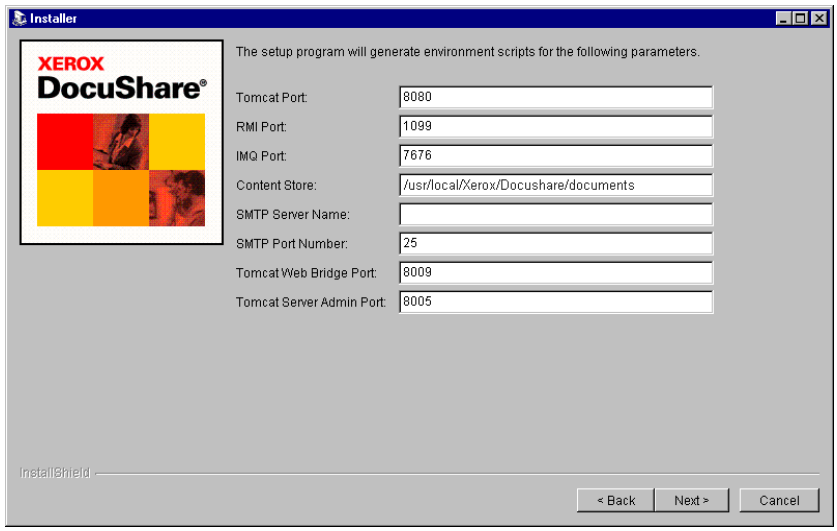
NOTE: The DocuShare 2.2 Data Migration Tool is included with the Full DocuShare 3.x or DocuShare 3.x without Scan Feature installations. The Migration tool is used to transfer DocuShare 2.2 data to your 3.x server.



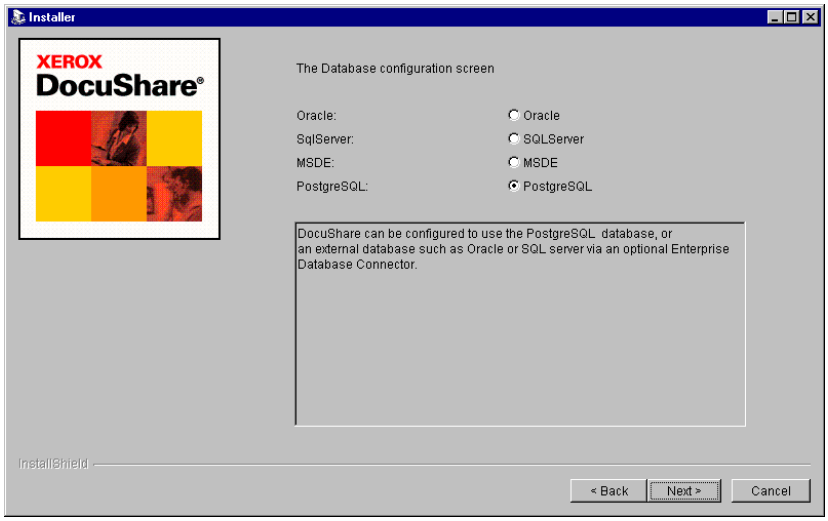
CAUTION: The full DocuShare installation has Scan-to-DocuShare capability which utilizes an FTP server port to receive documents. If your environment prohibits installing an FTP server for security reasons, select the option to install DocuShare without scanning.

8. Click **Next** and follow the onscreen instructions.
9. When the DocuShare Install Parameters window displays, make any changes to the parameters or click **Next** to accept the default settings. DocuShare requires 6 TCP ports.
   - Tomcat port—designated port for the Tomcat server (default port: 8080)
   - RMI port—designated port for the RMI server (default port: 1090)
   - RMI host—matches the RMI server's hostname
   - IMQ port—designated port for the IMQ JMS server port number (default port: 7676)
   - IMQ host—matches the IMQ server's hostname
   - Content store—designated directory location for document repository
   - SMTP Server Name—fully qualified DNS name for the SMTP mail server
   - SMTP Port Number—designated port for the SMTP server (default port: 25)

- Tomcat Web Bridge Port—designated port for the Tomcat Web Bridge (default port: 8009)
- Tomcat Server Admin Port—designated port for the Tomcat Web server (default port: 8005)



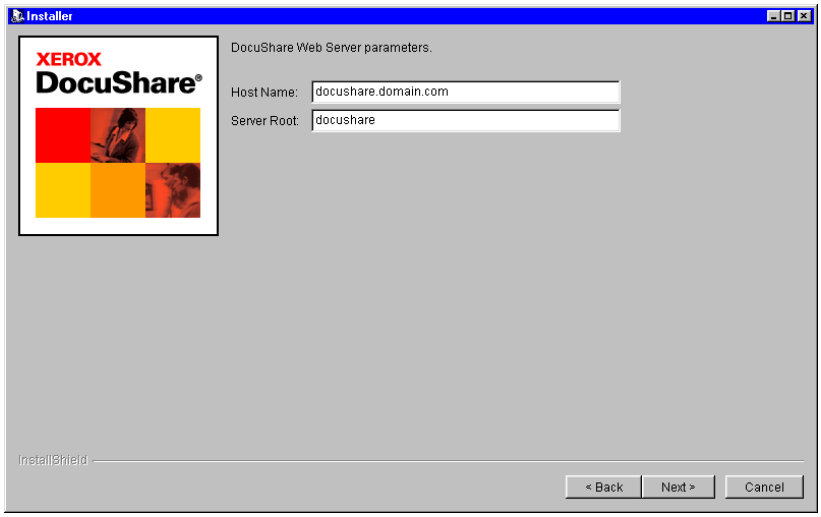
10. When the Database Configuration screen displays, select the database option for your DocuShare site and click **Next**.



11. If you are using PostgreSQL as your DocuShare database, do the following:
    a. Enter the Database User and Password.
    b. Enter the appropriate database information.
    c. Click **Next** to continue.

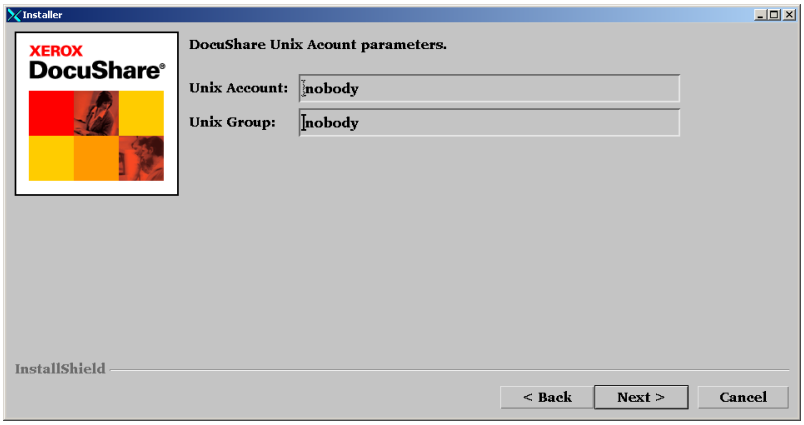
12. When the Web Server Interaction screen displays, select the web server option for your DocuShare site. Click **Next** to continue.

13. When the DocuShare Web server parameters window displays, enter the hostname (fully qualified DNS name, such as docushare.domain.com) for your DocuShare server. Click **Next** to continue.



14. When the UNIX Account Parameters window displays, enter the appropriate information.

NOTE: The default is **nobody**, which allows any user with an UNIX account to login and start DocuShare. If Scan-to-DocuShare is installed, you must be root to start DocuShare to enable the scan feature.



15. Click **Next** to continue the installation.
16. When the Installer completes the DocuShare installation, click **Finish** to close the Installer.
17. In a command window, cd to **<DSHome>/bin** and enter **./start_docushare.sh** to start DocuShare.

NOTE: DocuShare initial startup automatically performs dsindexing; allow five minutes before accessing the site via a browser.

18. If you had elected to use Apache as a web server, go to Appendix B, Web Servers to configure Apache as the web server.
19. If your DocuShare site is enabled for Scan-to-DocuShare, you need to disable the UNIX FTP service on your UNIX system. Go to Disabling the UNIX FTP service on page 3–21.
20. To license your DocuShare server:
    a. Log into the DocuShare server as admin using the password you supplied during the installation.
    b. On the navigation bar, click **Admin Home**.
    c. From the Administration menu, click **Site Management** / **License**.
    d. Record or copy your server ID.
    e. If this installation is for evaluation, click the link or go to: http://docushare.xerox.com/ds30/ds30-trial.htm to complete the form and obtain a 30-day license.

    See Licensing on page 1–3 to obtain a DocuShare license for your site.
21. Refer to the *DocuShare Administrator Guide* to configure your DocuShare site.

Migrating data to DocuShare 3.x

If you are upgrading from DocuShare 2.2 to DocuShare 3.x on an UNIX server, the DocuShare Installer CD includes a data migration tool to transfer your 2.2 data files to your new DocuShare 3.x server. Install the migration tool on your existing DocuShare 2.2 server.

Migration overview

The migration tool copies content and metadata from a DocuShare 2.2 server (source) to a DocuShare 3.x server (target). This includes repository contents as well as object property metadata and all user and group accounts. The following is an overview for migrating data from DocuShare 2.2 to a DocuShare 3.x server:

1. Access to a licensed DocuShare 3.x server (target).

NOTE: The server must be a new install, not a previously installed 3.x server with metadata. The 3.x server must be licensed to equal or exceed the number of users for the 2.2 server.

2. Install the migration tool on the DocuShare 2.2 server (source) .

NOTE: The DocuShare server must have Service Pack 1b or higher and be set to Read-Only.

3. Migrate DocuShare data.
4. If applicable, upgrade users to DocuShare 3.x Windows Client software.
5. If applicable, merge 3.x VDF files.

Preparing to migrate data

NOTE: If source and target servers are on the same system, you only need to install DocuShare once. The DocuShare 2.2 Data Migration Tool is included with the Full DocuShare 3.x and DocuShare 3.x without Scan Feature installations.

Backup

The migration tool makes a copy of your content but does not modify the current site. It is recommended to backup the source server prior to attempting the migration.

Disk space

Migrating data requires access to adequate system disk space and virtual memory.

- Recommended free disk space for DS 2.2 data to DS 3.x migration staging.
  - **Local migration**—migrating on the same local disk: minimum free disk space is 2 times the current DS 2.2 directory size.

  - **Remote migration**—migrating from a local to a remote system: minimum free disk space is equal or greater than the DS 2.2 directory size.

- Recommended system and virtual memory requirements: the target DS 3.x system and virtual memory is equal or greater than the current DS 2.2 system.

Trashcan contents

Items in the Trashcan are not copied to the new 3.x server. Trashcan items should be **Restored** to their collections or **Expunged** prior to migrating data between the servers.

VDF files

The migration tool does not migrate any customized VDF files to your DS 3.x server. The files must be merged for 3.x.

Installing the migration tool

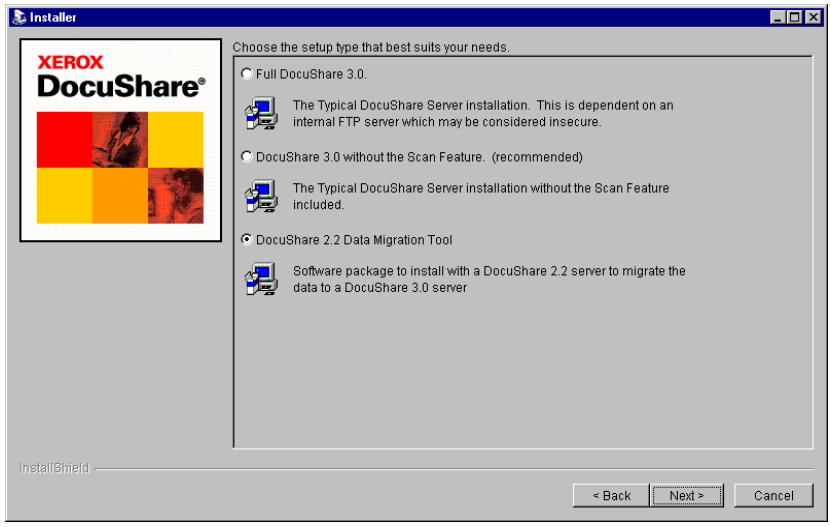
1. Log into your DocuShare 2.2 server as a UNIX server administrator (root).
2. Disable, on the source system, any remote access applications (for example, Xterm).
3. Insert the DocuShare CD-ROM into the server CD-ROM drive. If necessary, mount the cd as root.

NOTE: Refer to your Linux or Solaris documentation for mounting the CD-ROM drive.

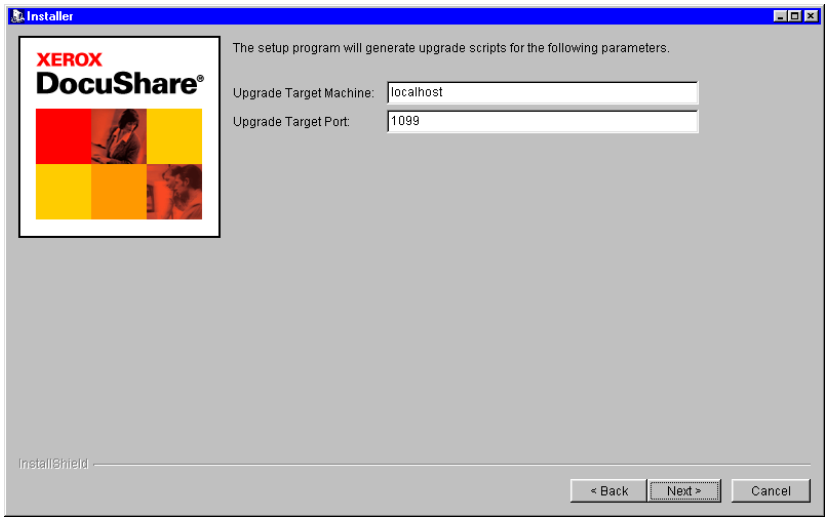
4. Double-click **docushare** in the CD-ROM root directory to start the installation.

TECH NOTE: If you had downloaded DocuShare from the web, run the executable **./DocuShare/docushare.sh** after extracting the executable from the gz (Linux) or tar (Solaris) file. See DocuShare download files on page 3–5.

5. When the DocuShare Installation Options window displays, select the **DocuShare 2.2 Data Migration Tool** option.



6. Click **Next**. The Migration Target screen displays.



7. Enter the target hostname (fully qualified DNS name, such as localhost.xerox.com) and the port parameter. Click **Next** to continue.

TECH NOTE: The upgrade target port is the RMI port of the DocuShare 3.x server (target). The default port number is 1099.

8. When the Install Wizard completes the Migration Tool installation, click **Finish** to close the installer.

Starting the migration tool

1. Set the DSHOME environment variable with the DocuShare 2.2 setup_docushare script so the migration tool can locate the DocuShare 2.2 site.
   a. In the DocuShare 2.2 directory, **cd <docushare directory>/bin**
   b. Enter **source setup_docushare**.

TECH NOTE: An alternative is to set the environment variable directly in the bourne shell:
DSHOME=/Docushare 2.2;export DSHOME

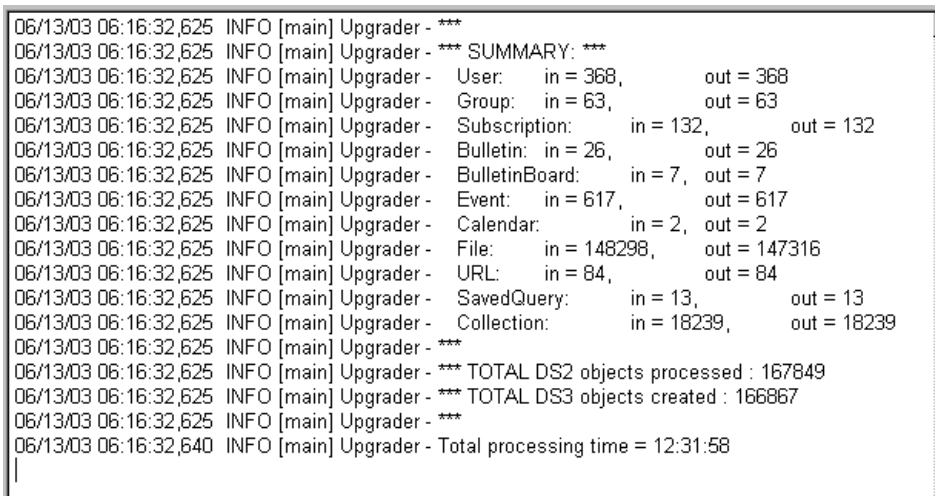
2. Create a temporary transfer directory (for example, ../temp).
3. Disable any virus scanning to improve throughput performance during the migration.
4. Set the source DocuShare server to Read-Only.
5. Change directory to where the DocuShare migration tool is installed (<DSHome>/bin).
6. Enter **dsupgrade2 ../temp** in a command window to start the data migration.

   The source server starts copying the files to the temp directory. Data migration continues by exporting the files to the target server. Progress of the migration is displayed in the command window. A log file is created in the DocuShare 3.x installed directory, for example ../Xerox/Docushare/logs.
7. At the completion of data migration, you are prompted to remove the temporary files. Enter **yes** to remove the files or **no** to retain the temporary copy.
8. Check the log file for any errors.
9. Perform the following database maintenance procedure. This procedure should be part of your normal database maintenance schedule.
   a. For a PostgreSQL database: **vacuumdb -d <yourdatabase> -f -z -e**.

CAUTION: To preserve your PostgreSQL indexes, do not use the PostgreSQL cluster command. Cluster will physically reorder your index information.

   b. For a SQL server database: **update statistics for query analyzer**, select 100% option.
10. Run **dsindex -a index_all** from the DocuShare 3.x server bin directory.

11. When migration completes, a Migration Status log displays.



12. Verify that all DocuShare 2.2 data has migrated to the DocuShare 3.x server. Compare the Migration Status log with the About Statistics on the DocuShare 2.2 server.

    If there are significant differences in the migration statistics, it is possible that Trashcan contents were not expunged or restored prior to starting migration. Refer to Trashcan contents on page 3–12

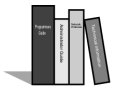
13. Reboot the server.

TECH NOTE: If Summary and Keyword fields contain more than 256 characters, the DocuShare 3.x Migration Tool leaves the fields empty after migration from DocuShare 2.2. The problem value and the original value are logged into the upgrader2.log file. The field values must be corrected to 256 characters or less.

14. Configure your DocuShare 3.x server.

NOTE: The migration tool does not copy your DocuShare 2.2 system configuration to the new 3.x server. System configuration must be manually changed on the DocuShare 3.x server Home site. Refer to the *DocuShare Administrator Guide* to configure your DocuShare 3.x server.

15. If applicable, upgrade users to DocuShare 3.x Windows Client software. Previous versions of Windows Client cannot map to the DocuShare 3.x server.
16. If applicable, merge your 3.x VDF templates.



RESOURCES: To merge VDF templates, refer to the *VDF Reference Guide,* available from the Developer Tools tab on the Administrator Help Desk.

Upgrading DocuShare 3.0

If you are upgrading DocuShare 3.0 to DocuShare 3.x, the DocuShare Installer includes an upgrade utility. You can upgrade your DocuShare 3.0 server to DocuShare 3.x using the DocuShare 3.x Installer CD or from the DocuShare 3.x application downloaded from the web.

NOTE: The DocuShare upgrade utility only upgrades DocuShare 3.00.00 or a later version. To check your DocuShare version, click **About DocuShare** on the Home page.

To monitor the DocuShare upgrade, installation and upgrade activity is recorded in a **log.txt** file located in the DocuShare home directory.

To upgrade DocuShare 3.0:

1. Log into your DocuShare 3.0 server as a UNIX server administrator (root).
2. Stop the DocuShare server. In a console window, cd to **<DSHome>/bin** and enter **./dsservice.sh -shutdown**.
3. To ensure the security of your DocuShare site data, backup your database. Refer to *Chapter 3, DocuShare Administrator Guide* or to your database server documentation, for data backup and restore procedures.
4. Insert the DocuShare CD-ROM into the server CD-ROM drive. If necessary, mount the cd as root.

NOTE: Refer to your Linux or Solaris documentation for mounting the CD-ROM drive.

5. To start the DocuShare upgrade.
   a. Double-click **docushare** in the CD-ROM root directory to start the installation.
   b. If you had downloaded DocuShare from the web and extracted the executable from the gz (Linux) or tar (Solaris) file, cd to **<DSHome>/bin** and enter **./docushare.sh**. See DocuShare download files on page 3–5.

   Optional for DocuShare upgrade: use the command line -**P docushareLog.cleanUp=false** to preserve configuration and upgrade data at the completion of the DocuShare upgrade.

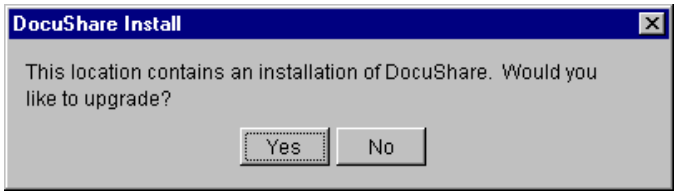
   To use this utility, start the upgrade in a console window:

   ./docushare.sh -P docushareLog.cleanUp=false
6. Click **Install DocuShare** on the DocuShare Install Menu to begin the installation.

   The installation program uses Java to install the product. It takes a few minutes to unpack and install the Java files. Click **Next** to start the DocuShare installation and follow the onscreen instructions.
7. When the DocuShare Installation options window displays, select the option to install DocuShare.

CAUTION: The full DocuShare installation has Scan-to-DocuShare capability which utilizes an FTP server port to receive documents. If your environment prohibits installing an FTP server for security reasons, select the option to install DocuShare without scanning.

8. Click **Next** and follow the onscreen instructions.
9. When the Upgrade Option window displays, click **Yes** to upgrade your server.



10. Follow the onscreen instructions to continue the upgrade. During the upgrade process, the DocuShare upgrade utility backs up the appropriate system server configuration and data.
11. When the installer completes the DocuShare upgrade, click **Finish** to close the installer.
12. In a command window, cd to**<DSHome>/bin/** and enter **./start_docushare.sh** to start DocuShare.
13. Perform the following database maintenance procedure. This procedure should be part of your normal database maintenance schedule.
    a. For a PostgreSQL database: **vacuumdb -d <yourdatabase> -f -z -e**.

CAUTION: To preserve your PostgreSQL indexes, do not use the PostgreSQL cluster command. Cluster will physically reorder your index information.

    b. For a SQL server database: **update statistics for query analyzer**, select 100% option.

NOTE:

14. Run **dsindex index_all** from the DocuShare 3.x server bin directory.

Uninstalling DocuShare

To uninstall DocuShare 3.x from your Solaris/Linux server, run the uninstall script, doc_uninstaller. Uninstall will remove the DocuShare directory and its contents. You can do the following before uninstalling DocuShare.

- Leave the repository in its current location.
- Save your repository content to another storage media by using the DocuShare command line utility, **dsexport**, prior to uninstalling DocuShare. Refer to the *DocuShare Command Line Utilities Guide* for details.

To uninstall DocuShare:

1. Log into the server as a UNIX server administrator (root).
2. Stop the DocuShare server. In a console window, change directory to **<DSHome>/bin** and enter **./stop_docushare.sh**.
3. Change directory to **<DSHome>/_uninst**.
4. Enter **./doc_uninstall**. Follow the onscreen instructions.
5. Remove the directory in which DocuShare was installed.

NOTE: Uninstall removes all installed languages, such as French, German, and Spanish.

Closing the Tomcat servlet port

During the DocuShare 3.x installation, if you selected to install the Apache option on the Web Server Interaction page, you can configure your DocuShare server for SSL by closing the Tomcat web servlet port to web browser access.

To close the Tomcat servlet port:

1. Log into the server as a UNIX server administrator (root).
2. In a console window, check the Tomcat servlet port status using the command, **./dsservice.sh status** in the directory ../Xerox/Docushare/bin.
3. Stop DocuShare by entering the command, **./stop_docushare.sh**.

RESOURCES: For a complete list of start_docushare commands and arguments, enter **./start_docushare.sh help** in the console window.

4. Enter the command, **./start_docushare.sh tomcat http off**, to close the Tomcat web servlet http port. This action closes the port providing access to the Tomcat web servlet via a web browser.
5. Enter the command, **./start_docushare.sh tomcat http on**, to open the port to the Tomcat web servlet. This action allows access to the Tomcat web servlet.

NOTE: To update only the environment, add the argument **update-only** to the end of the start_docushare command.

Disabling the UNIX FTP service

The typical DocuShare installation has Scan-to-DocuShare capability which utilizes its own FTP server to receive documents. The FTP service on the UNIX systems must be disabled to allow DocuShare to receive scanned documents through its own FTP server port.

To disable the FTP service on Linux:

1. Log into the server as a UNIX server administrator (root).
2. From the Start menu, select **Service Configuration**.
3. In the Service Configuration window, de-select **wu-ftpd**.

To disable the FTP service on Solaris:

1. Log into the server as a UNIX server administrator (root).
2. Edit **/etc/inetd.conf** file by commenting out the line for FTPD daemon.
3. Enter **ps -ef | grep inetd** to obtain your system PID.
4. Restart **inetd**.
5. Enter the command, **Kill -HUP PID** (PID obtained in step 3).

Connecting to your DocuShare server

At the completion of the DocuShare installation, try connecting to your new DocuShare server using a web browser. The default URL is http://<fully qualified DNS name>:8080/docushare.

A. If DocuShare was installed to the home directory on your web site, the URL is:
http://<fully qualified DNS name>:<port>/

B. If DocuShare was installed into a subdirectory on your web site, the URL is:
http://<fully qualified DNS name>:<port>/<subdirectory_path>/

- If you specified to install Apache on your server, then the :<port> component of the URL is not used. For example: http://<fully qualified DNS name>/docushare
- If you specified to install only Tomcat on your server, then the :<port> component of the URL is 8080 (default).

If the installation was successful, you should be viewing the default home page of your new DocuShare server. The home page has links to many useful features and to several pre-installed collections.

DocuShare login

You can log in as **admin** at this time, using the password you created during the installation. You need to license the server to enable creating collections and adding documents to your server.

Account Creation Authority is the default allowing all users to access the site and create their own user accounts. Site access can be configured for limited or restricted access. Refer to the Account Management/Access Policies section in the *DocuShare Administrator Guide*.

RESOURCES: Take a moment to scan the *DocuShare User* and *Administrator Tutorials* that are included on the DocuShare Help page to familiarize yourself with DocuShare features and administration.

A

DocuShare Applications

This appendix provides installation instructions for DocuShare applications.

DocuShare Windows Client

DocuShare Windows Client enables you to conveniently access your DocuShare collections from Microsoft Windows Explorer. From a single desktop location, you can browse collections, edit and save files, drag and drop files to collections, and search for content.

To download and install the software, follow the steps below. After installing DocuShare Windows Client, get started using its features by selecting DocuShare Help Topics from Explorer's Help menu.

System requirements

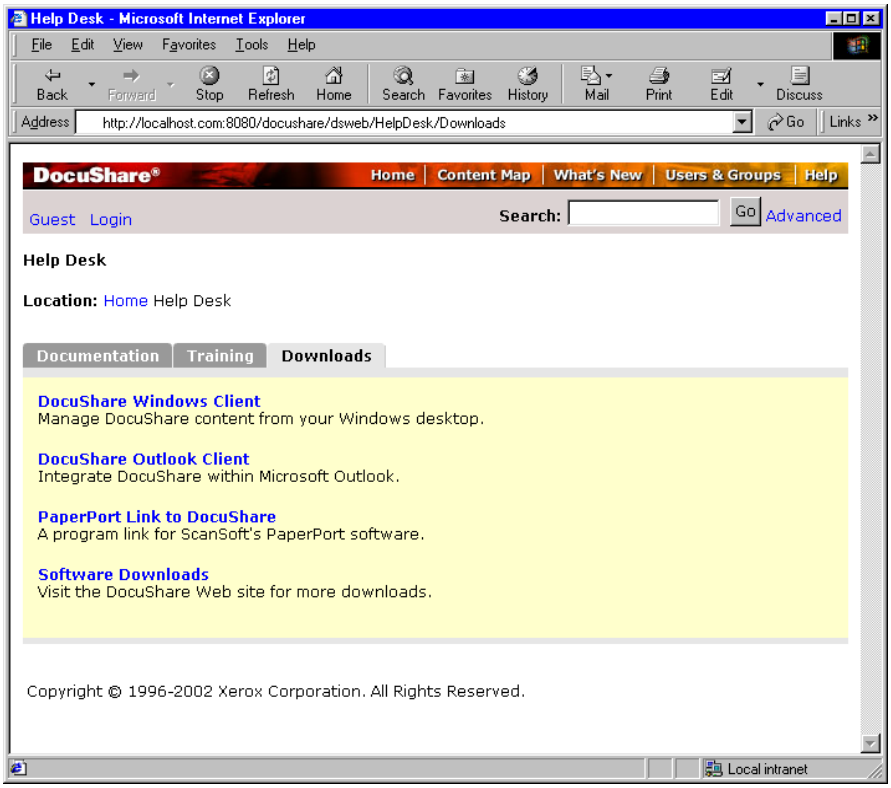
- Microsoft Windows NT 4.0 with Service Pack 6a, Microsoft Windows 2000 with Service Pack 4, or Microsoft Windows XP Professional with Service Pack 1, or higher
- Microsoft Office 2000 or XP
- Microsoft Internet Explorer version 5.5 or higher
- TCP/IP network connection to a DocuShare server running version 2.0 or higher
- 64 MB RAM or greater
- 30 MB free disk space for program files
- 100 MB or greater free disk space on the installation drive for work-in-progress files

NOTE: Installation of the application may fail if you do not have adequate administrative privileges on your computer. If you receive error messages that warn of locked or in-use resources, you may need to have an administrator install the software.

To install DocuShare Windows Client:

1. On the DocuShare navigation bar, click the **Help** link. The Help Desk displays.
2. Click the **Downloads** tab. A list of DocuShare applications displays.

3. Click the **DocuShare Windows Client**.



4. Download the installation file to a temporary location on your computer.
5. Locate the installation file using your file management tool. Double-click the file to start the installation program. Follow the on-screen instructions.
6. When the installation is complete, you can delete the installation program.
7. Open the DocuShare Client icon. Double-click **Map Server** to add a server to your DocuShare folder.

RESOURCES: Refer to the ReadMe file included with this release for any additional instructions or notes.

DocuShare Outlook Client

DocuShare Outlook Client enables you to conveniently access your DocuShare collections within Microsoft Outlook. From a single desktop location, you can browse collections, edit and save files, drag and drop messages and attachments to collections, and search for content.

To download and install the software, follow the steps below. After installing DocuShare Outlook Client, get started using its features by selecting DocuShare Outlook Client Help from Outlook's Help menu.

System requirements

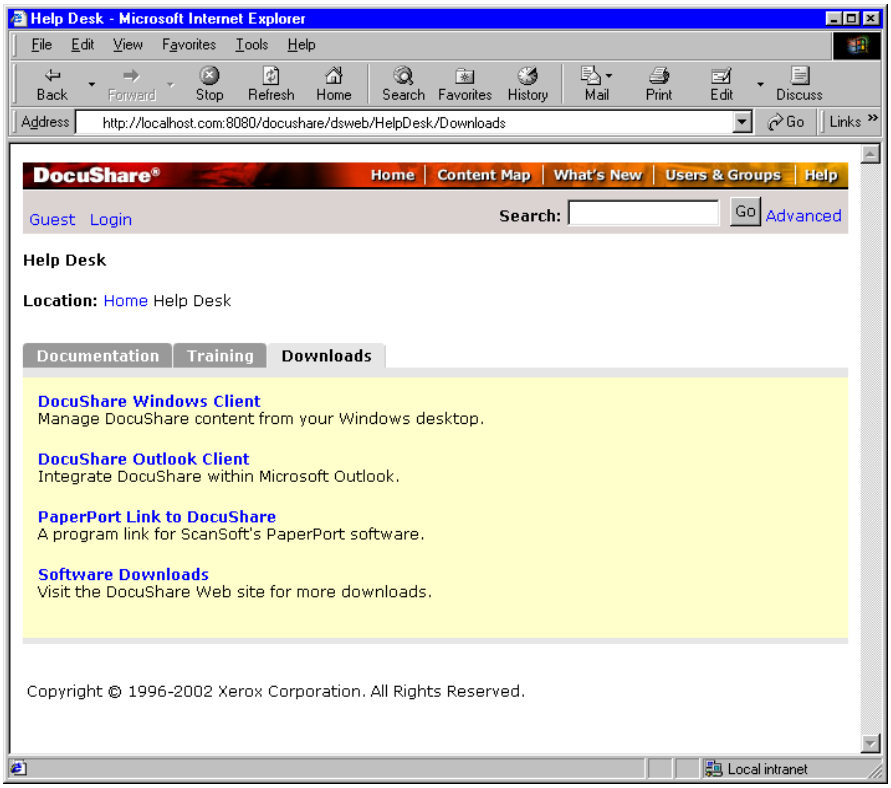
- Microsoft Windows NT 4.0 with Service Pack 6a, Microsoft Windows 2000 with Service Pack 4, Microsoft Windows XP Professional with Service Pack 1, or higher
- Microsoft Office 2000 or XP
- Microsoft Outook 2000 or 2002
- Microsoft Internet Explorer version 5.5 or higher
- TCP/IP network connection to a DocuShare server running version 2.0 or higher
- 64 MB RAM or greater
- 30 MB free disk space for program files
- 100 MB or greater free disk space on the installation drive for work-in-progress files

NOTE: Installation of the application may fail if you do not have adequate administrative privileges on your computer. If you receive error messages that warn of locked or in-use resources, you may need to have an administrator install the software.

To install DocuShare Outlook Client:

1. On the DocuShare navigation bar, click the **Help** link. The Help Desk displays.
2. Click the **Downloads** tab. A list of DocuShare applications displays.

3. Click the **DocuShare Outlook Client**.



4. Download the installation file to a temporary location on your computer.
5. Locate the installation file using your file management tool. Double-click the file to start the installation program. Follow the on-screen instructions.
6. When the installation is complete, you can delete the installation program.
7. Open Outlook and follow the Setup wizard to map your DocuShare server and enter your mail account information.

RESOURCES: Refer to the ReadMe file included with this release for any additional instructions or notes.

PaperPort Link to DocuShare

PaperPort Link to DocuShare is a program link for the popular ScanSoft PaperPort application that is included with many desktop scanners. The link enables you to send items to DocuShare from the PaperPort desktop.

To download and install the software, follow the steps below. After installing the PaperPort Link to DocuShare, online help is available by clicking the Link Help button in the Send To Options window.

PaperPort versions

DocuShare 3.x supports the following PaperPort Deluxe versions: 9.0 and 8.0.

System requirements

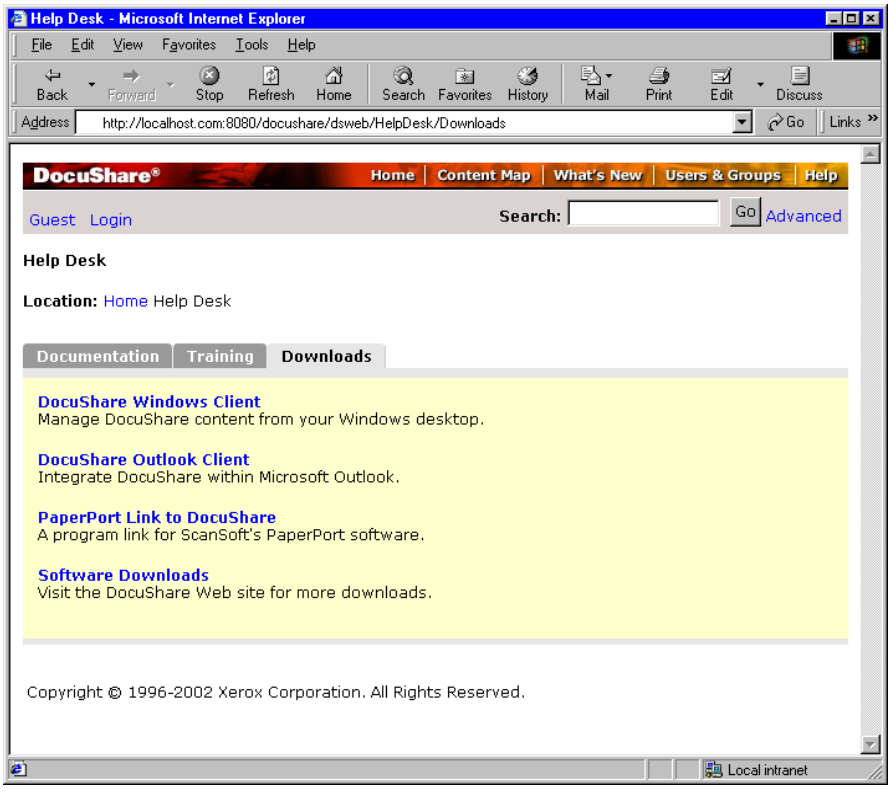
- Microsoft Windows NT 4.0 with Service Pack 6a, Microsoft Windows 2000 with Service Pack 4, Microsoft Windows XP Professional with Service Pack 1, or higher
- Microsoft Office 2000 or XP
- Microsoft Internet Explorer version 5.5 or higher
- TCP/IP network connection to a DocuShare server running version 2.0 or higher
- 64 MB RAM
- 30 MB free disk space for program files
- 100 MB (minimum) free disk space on the installation drive for work-in-progress files

NOTE: Installation of the application may fail if you do not have adequate administrative privileges on your computer. If you receive error messages that warn of locked or in-use resources, you may need to have an administrator install the software.

To install PaperPort Link to DocuShare:

1. On the DocuShare navigation bar, click the **Help** link. The Help Desk displays.
2. Click the **Downloads** tab. A list of DocuShare applications displays.

3. Click the **PaperPort Link to DocuShare**.



4. Download the installation file to a temporary location on your computer.
5. Locate the installation file using your file management tool. Double-click the file to start the installation program. Follow the on-screen instructions.
6. When the installation is complete, you can delete the installation program.
7. Open the PaperPort application. The DocuShare icon appears on the Send To bar.

RESOURCES: Refer to the ReadMe file included with this release for any additional instructions or notes.

B

Web Servers

This appendix provides configuration instructions for Apache or Sun_ONE web servers to work with the DocuShare 3.x Tomcat servlet engine:

Configuring DocuShare for Apache on Windows

DocuShare 3 has been tested with Apache HTTP server version 2.0.40. This is the current Apache web server from www.apache.org. Apache was compiled along with the Tomcat connector to interact with DocuShare 3. The following procedure provides configuration instructions for the DocuShare 3-Tomcat servlet engine and Apache. The Tomcat-Apache bridge uses the mod_jk module that loads into Apache as Apache starts and uses the auto-generated configuration file from Tomcat to define the Apache module.

Apache was compiled to run from the **C:\apache2** directory. Added to the standard Apache install kit is the tomcat-config directory. This directory includes the following files:

- **httpd.conf**—an example httpd configuration file with Tomcat bridge additions
- **mod_jk-howto.html**—documentation from apache.org to configure Apache and Tomcat
- **server.xml**—an example of the Tomcat server configuration file with auto configuration lines added
- **jk**—the directory to add the bridge configuration for Tomcat
- **jk\worker.properties**—an example of the Apache-Tomcat bridge configuration

Configuring the Apache connection

To configure the bridge with the preconfigured file:

The DocuShare install wizard creates a file that contains the values that point to the DocuShare installation. This file is located at
<DocuShare Installation Directory>\tomcat\conf\jk\apache2.0\httpd.conf.

1. Add the lines contained in this file to your **httpd.conf** file for your Apache installation. A typical location for this file is **<ApacheHome>\conf\httpd.conf**. You will need to edit the correct config file for your version of Apache.
2. Copy the bridge library to the Apache directory:
   <DocuShareHome>\tomcat\bin\native\apache2.0\mod_jk.dll <ApacheHome>\modules.
3. Restart Apache.

```
apachectl stop
apachectl start
```

TECH NOTE: If you prefer to manually configure the DocuShare-Apache connection, refer to the documentation in the Apache connection kit for details.

This completes the Apache configuration for Windows. Now you can connect to DocuShare 3 through a browser of your choice.

Configuring DocuShare for Apache on Linux

DocuShare 3 was tested with Apache HTTP server version 1.3.27 and 2.0.47. Apache 2.0.47 was tested with RedHat versions 7.3 and 8.0 and Apache 1.3.27 tested with RedHat versions 7.1 through 7.3.

Apache was compiled along with the Tomcat connector to interact with DocuShare 3. The following procedure provides configuration instructions for the DocuShare 3-Tomcat servlet engine. The Tomcat-Apache bridge uses the mod_jk module that loads into Apache as Apache starts and uses the auto-generated configuration file from Tomcat to define the Apache module.

The Apache connection kit contains two directories:

- **/lib**
  - **mod_jk.so**
- **/tomcat-conf**
  - **httpd.conf**—an example httpd configuration file with Tomcat bridge additions
  - **mod_jk-howto.html**—the documentation from apache.org on how to configure Apache and Tomcat
  - **server.xml**—an example of the Tomcat server configuration file with the auto configuration lines added
  - **jk**—the directory to add the bridge configuration for Tomcat
  - **jk/worker.properties**—an example of the Apache-Tomcat bridge configuration

Apache version 2.0.47

If you have Apache version 2.0.47 installed, use the following procedure to configure the DocuShare-Apache connection.

The DocuShare install wizard creates a file that contains the values that point to the DocuShare installation. This file is located at **<DocuShare Installation Directory>/tomcat/conf/jk/apache2.0/httpd.conf**.

1. Add the lines contained in this file to your **httpd.conf** file for your Apache installation. A typical location for this file on Linux is **/etc/httpd/conf/httpd.conf**. You will need to edit the correct config file for your version of Apache.
2. Copy the bridge library to the Apache directory. If your Apache installation contains a <ApacheHome>/modules directory and not a <ApacheHome>/libexec directory, you can create the libexec directory by linking with the modules directory.
   a. **Cd <ApacheHome>**
   b. Enter **In -s modules libexec**
   c. Perform the bridge library copy. Copy the correct bridge for your RedHat installation:
      - For RedHat 7.x.
        <DocuShareHome>/tomcat/bin/native/apache2.0/mod_jk.so <ApacheHome>/libexec.
      - For RedHat 8.0.
        <DocuShareHome>/tomcat/bin/native/apache2.0/mod_jk_rh8.so <ApacheHome>/libexec/mod_jk.so

3. Restart Apache.

```
apachectl stop
apachectl start
```

TECH NOTE: If you prefer to manually configure the DocuShare-Apache connection, refer to the documentation in the Apache connection kit for details.

This completes the Apache 2.0.47 configuration for Linux. Now you can connect to DocuShare 3 through a browser of your choice.

Apache version 1.3.27

If you have Apache version 1.3.27 installed, use the following procedure to configure the DocuShare-Apache connection.

The DocuShare install wizard creates a file that contains the values that point to the DocuShare installation. This file is located at
<DocuShare Installation Directory>/tomcat/conf/jk/apache1.3/httpd.conf.

1. Add the lines contained in this file to your **httpd.conf** file for your Apache installation. A typical location for this file on Linux is **/etc/httpd/conf/httpd.conf**. You will need to edit the correct config file for your version of Apache.
2. Copy the bridge library to the Apache directory. If your Apache installation contains a <ApacheHome>/modules directory and not a <ApacheHome>/libexec directory, you can create the libexec directory by linking with the modules directory.
   a. **Cd <ApacheHome>**
   b. Enter **ln -s modules libexec**
   c. Perform the bridge library copy

   <DocuShareHome>/tomcat/bin/native/apache1.3/mod_jk.so <ApacheHome>/libexec.
3. Restart Apache.

```
apachectl stop
apachectl start
```

TECH NOTE: If you prefer to manually configure the DocuShare-Apache connection, refer to the documentation in the Apache connection kit for details.

This completes the Apache version 1.3.27 configuration. Now you can connect to DocuShare 3 through a browser of your choice at the location **http://<host>/docushare/dsweb/index.html**.

Configuring DocuShare for Apache on Solaris

DocuShare 3 has been tested with Apache HTTP server version 1.3.27 and 2.0.47. Apache was compiled along with the Tomcat connector to interact with DocuShare 3. The following procedure provides configuration instructions for the DocuShare 3-Tomcat servlet engine and Apache. The Tomcat-Apache bridge uses the mod_jk module that loads into Apache as Apache starts and uses the auto-generated configuration file from Tomcat to define the Apache module.

The Apache connection kit contains two directories:

- **/lib**
  - **mod_jk.so**
- **/tomcat-conf**
  - **httpd.conf**—an example httpd configuration file with Tomcat bridge additions
  - **mod_jk-howto.html**—the documentation from apache.org on how to configure Apache and Tomcat
  - **server.xml**—an example of the Tomcat server configuration file with the auto configuration lines added
  - **jk**—the directory to add the bridge configuration for Tomcat
  - **jk/worker.properties**—an example of the Apache-Tomcat bridge configuration

Apache version 2.0.47

If you have Apache version 2.0.47 installed, use the following procedure to configure the DocuShare-Apache connection.

The DocuShare install wizard creates a file that contains the values that point to the DocuShare installation. This file is located at
<DocuShare Installation Directory>/tomcat/conf/jk/apache2.0/httpd.conf.

1. Add the lines contained in this file to your **httpd.conf** file for your Apache installation. A typical location for this file on Solaris is **/etc/httpd/conf/httpd.conf**. You will need to edit the correct config file for your version of Apache.
2. Copy the bridge library to the Apache directory. If your Apache installation contains a <ApacheHome>/modules directory and not a <ApacheHome>/libexec directory, you can create the libexec directory by linking with the modules directory.
   a. **Cd <ApacheHome>**
   b. Enter **In -s modules libexec**
   c. Perform the bridge library copy

   <DocuShareHome>/tomcat/bin/native/apache2.0/mod_jk.so <ApacheHome>/libexec
3. Restart Apache.

   ```
   apachectl stop
   apachectl start
   ```

TECH NOTE: If you prefer to manually configure the DocuShare-Apache connection, refer to the documentation in the Apache connection kit for details.

This completes the Apache version 2.0.47 configuration. Now you can connect to DocuShare 3 through a browser of your choice.

Apache version 1.3.27

If you have Apache version 1.3.27 installed, use the following procedure to configure the DocuShare-Apache connection.

The DocuShare install wizard creates a file that contains the values that point to the DocuShare installation. This file is located at
<DocuShare Installation Directory>/tomcat/conf/jk/apache1.3/httpd.conf.

1. Add the lines contained in this file to your **httpd.conf** file for your Apache installation. A typical location for this file on Solaris is **/etc/httpd/conf/httpd.conf**. You will need to edit the correct config file for your version of Apache.
2. Copy the bridge library to the Apache directory. If your Apache installation contains a <ApacheHome>/modules directory and not a <ApacheHome>/libexec directory, you can create the libexec directory by linking with the modules directory.
   a. **Cd <ApacheHome>**
   b. Enter **ln -s modules libexec**
   c. Perform the bridge library copy

   <DocuShareHome>/tomcat/bin/native/apache1.3/mod_jk.so <ApacheHome>/libexec.
3. Restart Apache.

   ```
   apachectl stop
   apachectl start
   ```

TECH NOTE: If you prefer to manually configure the DocuShare-Apache connection, refer to the documentation in the Apache connection kit for details.

This completes the Apache version 1.3.27 configuration. Now you can connect to DocuShare 3 through a browser of your choice at the location **http://<host>/docushare/dsweb/index.html**.

Sun ONE Web Server

This section provides configuration instructions for the Tomcat connector to the Sun ONE web server (also known as Netscape or iPlanet). In this section, the Netscape/iPlanet/Sun ONE web server will simply be referred to as the Sun ONE web server.

DocuShare 3 has been tested with the Tomcat connector to the Sun ONE web server, version iPlanet-WebServer-Enterprise/6.0. The following procedures are compatible for both Sun ONE version 4. 0 and 6.0.

Configuring the Sun ONE web server

There are two options to configuring the Sun ONE web server for each platform:

- Using the preconfigured file.
- Using the connection kit.

Configuring Sun ONE for DocuShare on Windows

The following procedure provides the configuration of the Tomcat servlet engine in DocuShare 3. The Tomcat/Sun ONE bridge uses the mod_jk module that loads into Sun ONE as the web server starts.

There are two main directories and associated files in this connection kit:

- **/lib**
  - **nsapi_redirect.dll**—the tomcat ajp13 redirector library
- **/conf**
  - **worker.properties**—an example of the Tomcat/Sun One bridge configuration
  - **obj.conf.orig**—a clean Sun ONE web server configuration file from a fresh install
  - **obj.conf—**an example of a Sun ONE web server configuration file after updates to activate the Tomcat/Sun One bridge

Configuring the web server

The DocuShare install wizard creates a file that contains the values that point to the DocuShare installation. This file is located at
<DocuShare Installation Directory>\tomcat\conf\jk\netscape\obj.conf.

1. Adding the bridge library location.

   Add the lines within this file for your Sun ONE installation. Depending on the version of web server, these lines go into the **Init** section of either the **obj.conf** file or the **magnus.conf** file for the web server.

TECH NOTE: Sun ONE version 4.0 has an **obj.conf** file and version 6.0 has both an **obj.conf** and **magnus.conf** files.

Replace **/usr/local/Xerox/Docushare** with the directory location where DocuShare is installed or use the preconfigured lines from **<DocuShareInstallationDirectory>\tomcat\conf\jk\netscape\obj.conf**.

TECH NOTE: Use forward slashes; backward slashes can cause problems. If you want to minimize the log file size, substitute **emerg** for **debug**. Only critical Tomcat/Sun ONE activities are logged.

```
Init fn="load-modules" funcs="jk_init,jk_service" shlib="C:/usr/local/
Xerox/Docushare/ds3-netscape-solaris/lib/nsapi_redirect.dll"

Init fn="jk_init" worker_file="C:/usr/local/Xerox/Docushare/ds3-
netscape-solaris/config/workers.properties" log_level="debug"

log_file="C:/usr/local/Xerox/Docushare/ds3-netscape-solaris/config/
nsapi.log"
```

2. Adding the name mapping.

   Add the following lines to the beginning of the **NameTrans** section of the **obj.conf** file.

```
NameTrans fn="assign-name" from="/servlet/*" name="tcservlet"

NameTrans fn="assign-name" from="/examples/*" name="tcservlet"

NameTrans fn="assign-name" from="/docushare" name="tcservlet"

NameTrans fn="assign-name" from="/docushare/*" name="tcservlet"
```

3. Adding the service mapping.

   Add the following lines to the end of the **obj.conf** file.

```
<Object name="tcservlet">

ObjectType fn=force-type type=text/plain

Service fn="jk_service" worker="ajp13"

</Object>
```

4. Restart the web server.
   a. Stop the web server with the admin console.
   b. Load the new configuration with the admin console.
   c. Start the web server with the admin console.

This completes the Windows Tomcat/Sun ONE configuration. Connect to DocuShare 3 through a browser of your choice at the location **http://<host>/docushare/**.

Configuring Sun ONE for DocuShare on Linux

The following procedure provides the configuration of the Tomcat servlet engine within DocuShare 3. The Tomcat/Sun ONE bridge uses the mod_jk module that loads into Sun ONE as the web server starts.

There are two main directories and associated files in this connection kit:

- **/lib**
  - **nsapi_redirector.so**—the tomcat ajp13 redirector library
- **/conf**
  - **worker.properties**—an example of the Tomcat/Sun One bridge configuration
  - **obj.conf.orig**—a clean Sun ONE web server configuration file from a fresh install
  - **obj.conf—**an example of a Sun ONE web server configuration file after updates to activate the Tomcat/Sun One bridge

Configuring the web server

The DocuShare install wizard creates a file that contains the values that point to the DocuShare installation. This file is located at
<DocuShare Installation Directory>/tomcat/conf/jk/netscape/obj.conf.

1. Adding the bridge library location.

   Add the lines within this file for your Sun ONE installation. Depending on the version of web server, these lines go into the **Init** section of either the **obj.conf** file or the **magnus.conf** file for the web server.

TECH NOTE: Sun ONE version 4.0 has an **obj.conf** file and version 6.0 has both an **obj.conf** and **magnus.conf** files.

Replace **/usr/local/Xerox/Docushare** with the directory location where DocuShare is installed or use the preconfigured lines from **<DocuShareInstallationDirectory>/tomcat/conf/jk/netscape/obj.conf**.

TECH NOTE: If you want to minimize the log file size, substitute **emerg** for **debug**. Only critical Tomcat/Sun ONE activities are logged.

```
Init fn="load-modules" funcs="jk_init,jk_service" shlib="/usr/local/
Xerox/Docushare/ds3-netscape-solaris/lib/nsapi_redirector.so"
Init fn="jk_init" worker_file="/usr/local/Xerox/Docushare/ds3-netscape-
solaris/config/workers.properties" log_level="debug"
log_file="/usr/local/Xerox/Docushare/ds3-netscape-solaris/config/
nsapi.log"
```

2. Adding the name mapping.

   Add the following lines to the beginning of the **NameTrans** section of the **obj.conf** file.

   ```
   NameTrans fn="assign-name" from="/servlet/*" name="tcservlet"
   NameTrans fn="assign-name" from="/examples/*" name="tcservlet"
   NameTrans fn="assign-name" from="/docushare" name="tcservlet"
   NameTrans fn="assign-name" from="/docushare/*" name="tcservlet"
   ```

3. Adding the service mapping.

   Add the following lines to the end of the **obj.conf** file.

   ```
   <Object name="tcservlet">
   ObjectType fn=force-type type=text/plain
   Service fn="jk_service" worker="ajp13"
   </Object>
   ```

4. Restart the web server.

   a. Stop the web server with the admin console.
   b. Load the new configuration with the admin console.
   c. Start the web server with the admin console.

This completes the Linux Tomcat/Sun ONE configuration. Connect to DocuShare 3 through a browser of your choice at the location **http://<host>/docushare/**.

Configuring Sun ONE for DocuShare on Solaris

DocuShare 3 has been tested with the Tomcat connector to the Sun ONE web server, version iPlanet-WebServer-Enterprise/6.0. The following procedure provides the configuration of the Tomcat servlet engine within DocuShare 3. The Tomcat/Sun ONE bridge uses the mod_jk module that loads into Sun ONE as the web server starts.

There are two main directories and associated files in this connection kit:

- **/lib**
  - **nsapi_redirector.so**—the tomcat ajp13 redirector library
- **/conf**
  - **worker.properties**—an example of the Tomcat/Sun One bridge configuration
  - **obj.conf.orig**—a clean Sun ONE web server configuration file from a fresh install
  - **obj.conf—**an example of a Sun ONE web server configuration file after updates to activate the Tomcat/Sun One bridge

Configuring the web server

The DocuShare install wizard creates a file that contains the values that point to the DocuShare installation. This file is located at
<DocuShare Installation Directory>/tomcat/conf/jk/netscape/obj.conf.

1. Adding the bridge library location.

   Add the lines within this file for your Sun ONE installation. Depending on the version of web server, these lines go into the **Init** section of either the **obj.conf** file or the **magnus.conf** file for the web server.

TECH NOTE: Sun ONE version 4.0 has an **obj.conf** file and version 6.0 has both an **obj.conf** and **magnus.conf** files.

Replace **/usr/local/Xerox/Docushare** with the directory location where DocuShare is installed or use the preconfigured lines from **<DocuShareInstallationDirectory>/tomcat/conf/jk/netscape/obj.conf**.

TECH NOTE: If you want to minimize the log file size, substitute **emerg** for **debug**. Only critical Tomcat/Sun ONE activities are logged.

```
Init fn="load-modules" funcs="jk_init,jk_service" shlib="/usr/local/
Xerox/Docushare/ds3-netscape-solaris/lib/nsapi_redirector.so"
Init fn="jk_init" worker_file="/usr/local/Xerox/Docushare/ds3-netscape-
solaris/config/workers.properties" log_level="debug"
log_file="/usr/local/Xerox/Docushare/ds3-netscape-solaris/config/
nsapi.log"
```

2. Adding the name mapping.

   Add the following lines to the beginning of the **NameTrans** section of the **obj.conf** file.

   ```
   NameTrans fn="assign-name" from="/servlet/*" name="tcservlet"
   NameTrans fn="assign-name" from="/examples/*" name="tcservlet"
   NameTrans fn="assign-name" from="/docushare" name="tcservlet"
   NameTrans fn="assign-name" from="/docushare/*" name="tcservlet"
   ```

3. Adding the service mapping.

   Add the following lines to the end of the **obj.conf** file.

   ```
   <Object name="tcservlet">
   ObjectType fn=force-type type=text/plain
   Service fn="jk_service" worker="ajp13"
   </Object>
   ```

4. Restart the web server.

   a. Stop the web server with the admin console.
   b. Load the new configuration with the admin console.
   c. Start the web server with the admin console.

This completes the Solaris Tomcat/Sun ONE configuration. Connect to DocuShare 3 through a browser of your choice at the location **http://<host>/docushare/**.

C

Databases

This appendix provides configuration instructions for DocuShare 3.x and optional databases.

PostgreSQL on Linux

DocuShare 3 has been tested with PostgreSQL 7.2.3 that is installed on RedHat 7.3 and RedHat 8.0 versions of Linux. DocuShare 3 has been tested with PostgreSQL 7.3.

TECH NOTE: For enhanced performance, it is recommended to upgrade to PostgreSQL 7.2.3 before installing DocuShare 3 on RedHat 7.1. Make sure that your current PostgreSQL is disabled before installing PostgreSQL 7.2.3. This version of PostgreSQL is included in the PostgreSQL kit to assist with the upgrade.

This section describes the additional configuration required for PostgreSQL to support DocuShare 3. The three main requirements are:

- confirm that PostgreSQL is installed and running
- provide a tablespace for DocuShare 3 to use
- allow TCP/IP connectivity for the JDBC database driver.

Verifying PostgreSQL

To verify that PostgreSQL is installed and running, run this command, **ps -elf | grep postmaster**. If the following or similar response displays, then PostgreSQL is running.

```
000 S postgres 875 871 0 69 0 - 1262 do_sel Nov11 ? 00:00:01 /usr/bin/
postmaster -i
```

The executable for PostgreSQL is **postmaster**. If postmaster is not running, it may be installed but not started at boot up.

1. To switch postmaster on at boot up, enter the command, **ntsysv**. To run the ntsysv utility, you must be logged in as **root**.
2. Scroll down to the PostgreSQL service and press the space bar to add an asterisk to the service listing. This will start PostgreSQL the next time the system is booted.
3. If you do not want to reboot the system to start PostgreSQL, log into the system as the user, **postgres**, and enter the command, **postmaster -i &**.

   This will start PostgreSQL. If you do not find **postgresql** service when using ntsysv, then postgresql service may not be installed. Install the PostgreSQL RPM from the RedHat installation disks and set it to start at boot up with the ntsysv utility.

Using PostgreSQL 7.0

If you are using PostgreSQL 7.0 and do not plan to upgrade to 7.2.3, perform the following after installing DocuShare 3, to enhance the search performance.

1. Cd to **<DocuShareInstallDirectory>/config/**.
2. Edit the **JDBCPropertyBean.properties** file.
   a. Change the **searchResultChunkSize** value from **100** to **5**.
   b. Change the **linkChunkSize** value from **100** to **5**.

Installng PostreSQL 7.2.3 with the compiled version

This section provides instructions for installing PostgreSQL 7.2.3 using the compiled version.

PostgreSQL 7.2.3 was compiled on RedHat 7.1 using gcc 2.96. It was compiled with locales enabled to allow DocuShare to operate with languages other that English and configured to be installed at **/usr/local/pgsql**.

To install PostgreSQL:

1. Unpack the binary image.

   ```
   su
   cd /usr/local
   cp <cd location>/platform/Linux/PostgreSQL/postgresql-7.2.3-bin.tar.gz /usr/local
   gunzip postgresql-7.2.3-bin.tar.gz
   tar -xvf postgresql-7.2.3-bin.tar
   ```

2. Configure the install image along with the target machine.

   ```
   adduser postgres
   mkdir /usr/local/pgsql/data
   chown postgres /usr/local/pgsql/data
   su - postgres
   /usr/local/pgsql/bin/initdb -D /usr/local/pgsql/data
   /usr/local/pgsql/bin/postmaster -D /usr/local/pgsql/data >logfile 2>&1 &
   /usr/local/pgsql/bin/createdb test
   /usr/local/pgsql/bin/psql test
   ```

   This completes the PostgrSQL installation for Linux using the compiled version.

3. Go to TCP/IP Connectivity on page C–4.

Installing PostgreSQL 7.2.3 with the source version

This section provides instructions for installing PostgreSQL 7.2.3 by compiling the source code.

The requirements for this PostgreSQL installation is a C++ compiler and GNU make. If you do not have these installed, you can install them from the RedHat installation disks. After you have verified that there is a C++ compiler and GNU make, unpack the PostgreSQL source.

The configure command includes the switch to enable locales if you want to add other languages to DocuShare. For example, using the **/opt/pgsql** directory:

```
cd /opt
mkdir pgsql
cd pgsql
cp <cd location>/platform/Linux/PostgreSQL/postgresql-7.2.3.tar.gz.
gunzip postgresql-7.2.3.tar.gz
tar -xvf postgresql-7.2.3.tar
```

```
cd postgresql-7.2.3
./configure --enable-locale --enable-multibyte
make
su
make install
adduser postgres
mkdir /usr/local/pgsql/data
chown postgres /usr/local/pgsql/data
su - postgres
/usr/local/pgsql/bin/initdb -D /usr/local/pgsql/data
/usr/local/pgsql/bin/postmaster -D /usr/local/pgsql/data >logfile 2>&1 &
/usr/local/pgsql/bin/createdb test
/usr/local/pgsql/bin/psql test
```

NOTE: There are installation instructions at **/opt/pgsql/postgresql-7.2.3/INSTALL** that will assist you if the defaults are not sufficient.

This completes the PostgrSQL installation for Linux using the source version. Go to TCP/IP Connectivity on page C–4.

TCP/IP Connectivity

If this has not been done, set PostgreSQL to allow TCP/IP connectivity.

1. Log into the system as either **root** or **postgres**.
2. Change directory to the PostgreSQL configuration data directory. A typical RedHat directory location is **/var/lib/pgsql/data**.
3. Verify the installed version of PostgreSQL by checking the contents in the **PG_VERSION** file.

For PostgreSQL v7.0

To enable PostgreSQL TCP/IP connectivity:

1. Shutdown PostgreSQL.
   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl stop -D -m smart**.
2. Update the **/usr/local/pgsql/data/postgresql/postmaster.opts** file to include the **-i** switch. This will start postmaster with the TCP/IP connectivity option.
3. Update the **pg_hba.conf** file to allow TCP/IP connectivity to the database.

   There are examples of different connection options within the file. DocuShare 3 was tested with the following line added to the bottom of the file.

   ```
   host all x.x.x.x 255.255.255.255 trust
   ```

The x.x.x.x is the IP address of the target machine. This line allows all users on the target machine to connect to PostgreSQL. You can adjust the configuration to map to the standards within your organization.

4. Restart PostgreSQL to create DocuShare tablespace (DocuShare 3 Tablespace on page C–6).
   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl start -D /usr/local/pgsql/data**.

This completes the the TCP/IP connectivity for PostgreSQL v7.0.

For PostgreSQL v7.2

To enable PostgreSQL TCP/IP connectivity:

1. Shutdown PostgreSQL.
   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl stop -D -m smart**.
2. Update the **/usr/local/pgsql/data/postgresql/postmaster.conf** file to start postmaster with the TCP/IP connectivity option.

   Edit the line: #tcpip_socket = false to **tcpip_socket = true**
3. Update the **pg_hba.conf** file to allow TCP/IP connectivity to the database.

   There are examples of different connection options within the file. DocuShare 3 was tested with the following line added to the bottom of the file.

   ```
   host all x.x.x.x 255.255.255.255 trust
   ```

   The x.x.x.x is the IP address of the target machine. This line allows all users on the target machine to connect to PostgreSQL. You can adjust the configuration to map to the standards within your organization.
4. Restart PostgreSQL to create DocuShare tablespace (DocuShare 3 Tablespace on page C–6).
   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl start -D /usr/local/pgsql/data**.

This completes the TCP/IP connectivity for PostgreSQL v7.2.

For PostgreSQL v7.3

To enable PostgreSQL TCP/IP connectivity:

1. Shutdown PostgreSQL.
   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl stop -D -m smart**.
2. Update the **/usr/local/pgsql/data/postgresql/postmaster.conf** file to start postmaster with the TCP/IP connectivity option.

   Edit the line: #tcpip_socket = false to **tcpip_socket = true**
3. Update the **pg_hba.conf** file to allow TCP/IP connectivity to the database.

   There are examples of different connection options within the file. DocuShare 3 was tested with the following line added to the bottom of the file.

   ```
   host all x.x.x.x 255.255.255.255 trust
   ```

The x.x.x.x is the IP address of the target machine. This line allows all users on the target machine to connect to PostgreSQL. You can adjust the configuration to map to the standards within your organization.

4. Restart PostgreSQL to create DocuShare tablespace (DocuShare 3 Tablespace on page C–6).
   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl start -D /usr/local/pgsql/data**.

This completes the TCP/IP connectivity for PostgreSQL v7.3.

DocuShare 3 Tablespace

During the DocuShare 3 installation (new install), the install wizard creates the tablespace before creating the database tables. If you need to manually create the tablespace before installing DocuShare 3, use the following procedure.

To create tablespace manually:

1. Log into the target system as **postgres**.
2. Enter the command, **createdb –E UNICODE <DocuShare Tablespace Name>**.

This creates the tablespace for DocuShare 3 to use. You can enter any tablespace name, but be sure record the tablespace name. During the DocuShare 3 installation, you are prompted for a tablespace name that will be entered into the DocuShare 3 database schema.

PostgreSQL on Solaris

DocuShare 3 installation on a Solaris machine using the PostgreSQL database requires that the target database be installed and running. Solaris does not install PostgreSQL This section describes the additional configuration required for PostgreSQL to support DocuShare 3. The two main requirements are:

- provide a tablespace for DocuShare 3 to use
- allow TCP/IP connectivity for the JDBC database driver.

Included in the DocuShare 3 directory is the GNU source for PostgreSQL that DocuShare 3 was developed and tested. Also included is a compiled version of PostgreSQL. If you do not already have PostgreSQL installed on your target machine, use one of the two images to install and configure PostgreSQL.

Installing PostreSQL with the compiled version

This version of PostgreSQL was compiled on Solaris 2.8 using gcc 2.95.3. It was compiled with locales enabled to allow DocuShare to operate with languages other than English and configured to be installed at **/usr/local/pgsql**. If you are installing PostgreSQL using the compiled version, use the following instructions.

To install PostgreSQL:

1. Unpack the binary image.

   ```
   su
   cd /usr/local
   cp <cd location>/platform/Solaris/PostgreSQL/postgresql-7.2.3-bin.tar.Z
   uncompress postgresql-7.2.3-bin.tar.Z
   tar -xvf postgresql-7.2.3-bin.tar
   ```

2. Configure the install image along with the target machine.

   ```
   adduser postgres
   mkdir /usr/local/pgsql/data
   chown postgres /usr/local/pgsql/data
   su - postgres
   /usr/local/pgsql/bin/initdb -D /usr/local/pgsql/data
   /usr/local/pgsql/bin/postmaster -D /usr/local/pgsql/data >logfile 2>&1 &
   /usr/local/pgsql/bin/createdb test
   /usr/local/pgsql/bin/psql test
   ```

   This completes the PostgreSQL installation for Solaris using the compiled version.

3. Go to TCP/IP Connectivity on page C–9.

Installing PostgreSQL with the source version

This section provides instructions for installing PostgreSQL by compiling the source code.

The requirements of this PostgreSQL installation is a C++ compiler and GNU make. If you do not have these installed, you can download them from http://www.sunfreeware.com/. Make sure to download and install the software that matches the version of Solaris on the target machine. After you have verified that there is a C++ compiler and GNU make, unpack the PostgreSQL source.

The configure command includes the switch to enable locales if you want to add other languages to DocuShare. For example, using the **/opt/pgsql** directory:

```
cd /opt
mkdir pgsql
cd pgsql
cp <cd location>/platform/Solaris/PostgreSQL/postgresql-7.2.3.tar.Z
uncompress postgresql-7.2.3.tar.Z
tar -xvf postgresql-7.2.3.tar
cd postgresql-7.2.3
./configure --enable-locale --enable-multibyte
make
su
make install
adduser postgres
mkdir /usr/local/pgsql/data
chown postgres /usr/local/pgsql/data
su - postgres
/usr/local/pgsql/bin/initdb -D /usr/local/pgsql/data
/usr/local/pgsql/bin/postmaster -D /usr/local/pgsql/data >logfile 2>&1 &
/usr/local/pgsql/bin/createdb test
/usr/local/pgsql/bin/psql test
```

NOTE: There are installation instructions at **/opt/pgsql/postgresql-7.2.3/INSTALL** that will assist you if the defaults are not sufficient.

This completes the PostgreSQL installation for Solaris using the source version. Go to TCP/IP Connectivity on page C–9.

TCP/IP Connectivity

To enable PostgreSQL TCP/IP connectivity:

1. Log into the system as either **root** or **postgres**.
2. Shutdown PostgreSQL.
   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl stop -D -m smart**.
3. Update the **/usr/local/pgsql/data/postgresql/postmaster.conf** file to start postmaster with the TCP/IP connectivity option.

   Edit the line: #tcpip_socket = false to **tcpip_socket = true**
4. Update the **pg_hba.conf** file to allow TCP/IP connectivity to the database.

   There are examples of different connection options within the file. DocuShare 3 was tested with the following line added to the bottom of the file.

   ```
   host all x.x.x.x 255.255.255.255 trust
   ```

   The x.x.x.x is the IP address of the target machine. This line allows all users on the target machine to connect to PostgreSQL. You can adjust the configuration to map to the standards within your organization.
5. Restart PostgreSQL to create DocuShare tablespace (DocuShare 3 Tablespace on page C–9).
   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl start -D /usr/local/pgsql/data**.

This completes the TCP/IP connectivity for PostgreSQL.

DocuShare 3 Tablespace

During the DocuShare 3 installation (new install), the install wizard creates the tablespace before creating the database tables. If you need to manually create the tablespace before installing DocuShare 3, use the following procedure.

To create tablespace manually:

1. Log into the target system as **postgres**.
2. Enter the command, **createdb –E UNICODE <DocuShare Tablespace Name>**.

This creates the tablespace for DocuShare 3 to use. You can enter any tablespace name, but be sure record the tablespace name. During the DocuShare 3 installation, you are prompted for a tablespace name that will be entered into the DocuShare 3 database schema.

PostgreSQL with DocuShare on Windows

DocuShare 3 on the Windows platform has been tested with PostgreSQL 7.0 and 7.2 that are installed with RedHat 7.1, 7.3 and 8.0. DocuShare 3 was not tested with PostgreSQL installed on the Win32 platform. The standard DocuShare installation for the Windows platform uses the MSDE database.

NOTE: For enhanced performance, it is recommended to upgrade to PostgreSQL 7.2.3 before installing DocuShare 3 on RedHat 7.1. Make sure that your current PostgreSQL is disabled before installing PostgreSQL 7.2.3. This version of PostgreSQL is included in the PostgreSQL kit to assist with the upgrade.

This section describes the additional configuration required for PostgreSQL installed on Linux to support DocuShare 3. The three main requirements are:

- confirm that PostgreSQL is installed and running
- provide a tablespace for DocuShare 3 to use
- allow TCP/IP connectivity for the JDBC database driver.

Verifying PostgreSQL

To verify that PostgreSQL is installed and running, run this command, **ps -elf | grep postmaster**. If the following or similar response displays, then PostgreSQL is running.

```
000 S postgres 875 871 0 69 0 - 1262 do_sel Nov11 ? 00:00:01 /usr/bin/
postmaster -i
```

The executable for PostgreSQL is **postmaster**. If postmaster is not running, it may be installed but not started at boot up.

1. To switch postmaster on at boot up, enter the command, **ntsysv**. To run the ntsysv utility, you must be logged in as **root**.
2. Scroll down to the PostgreSQL service and press the space bar to add an asterisk to the service listing. This will start PostgreSQL the next time the system is booted.
3. If you do not want to reboot the system to start PostgreSQL, log into the system as the user, **postgres**, and enter the command, **postmaster -i &**.

   This will start PostgreSQL. If you do not find **postgresql** service when using ntsysv, then postgresql service may not be installed. Install the PostgreSQL rpm from the RedHat installation disks and set it to start at boot up with the ntsysv utility.

Using PostgreSQL 7.0

If you are using PostgreSQL 7.0 and do not plan to upgrade to 7.2.3, perform the following after installing DocuShare 3, to enhance the search performance.

1. Cd to **<DocuShareInstallDirectory>/config/**.
2. Edit the **JDBCPropertyBean.properties** file.
   a. Change the **searchResultChunkSize** value from **100** to **5**.
   b. Change the **linkChunkSize** value from **100** to **5**.
3. Go to TCP/IP Connectivity on page C–11.

TCP/IP Connectivity

If this has not been done, set PostgreSQL to allow TCP/IP connectivity.

1. Log into the system as either **root** or **postgres**.
2. Change directory to the PostgreSQL configuration data directory. A typical RedHat directory location is **/var/lib/pgsql/data**.
3. Verify the installed version of PostgreSQL by checking the contents in the **PG_VERSION** file.

For PostgreSQL v7.0

To enable PostgreSQL TCP/IP connectivity:

1. Shutdown PostgreSQL.
   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl stop -D -m smart**.
2. Update the **/usr/local/pgsql/data/postgresql/postmaster.opts** file to include the **-i** switch. This will start postmaster with the TCP/IP connectivity option.
3. Update the **pg_hba.conf** file to allow TCP/IP connectivity to the database.

   There are examples of different connection options within the file. DocuShare 3 was tested with the following line added to the bottom of the file.

   ```
   host all x.x.x.x 255.255.255.255 trust
   ```

   The x.x.x.x is the IP address of the target machine. This line allows all users on the target machine to connect to PostgreSQL. You can adjust the configuration to map to the standards within your organization.
4. Restart PostgreSQL to create DocuShare tablespace (DocuShare 3 Tablespace on page C–13).
   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl start -D /usr/local/pgsql/data**.

This completes the the TCP/IP connectivity for PostgreSQL v7.0.

For PostgreSQL v7.2

To enable PostgreSQL TCP/IP connectivity:

1. Shutdown PostgreSQL.
   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl stop -D -m smart**.

2. Update the **/usr/local/pgsql/data/postgresql/postmaster.conf** file to start postmaster with the TCP/IP connectivity option.

   Edit the line: #tcpip_socket = false to **tcpip_socket = true**

3. Update the **pg_hba.conf** file to allow TCP/IP connectivity to the database.

   There are examples of different connection options within the file. DocuShare 3 was tested with the following line added to the bottom of the file.

   ```
   host all x.x.x.x 255.255.255.255 trust
   ```

   The x.x.x.x is the IP address of the target machine. This line allows all users on the target machine to connect to PostgreSQL. You can adjust the configuration to map to the standards within your organization.

4. Restart PostgreSQL to create DocuShare tablespace (DocuShare 3 Tablespace on page C–13).

   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl start -D /usr/local/pgsql/data**.

This completes the TCP/IP connectivity for PostgreSQL v7.2.

For PostgreSQL v7.3

To enable PostgreSQL TCP/IP connectivity:

1. Shutdown PostgreSQL.

   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl stop -D -m smart**.

2. Update the **/usr/local/pgsql/data/postgresql/postmaster.conf** file to start postmaster with the TCP/IP connectivity option.

   Edit the line: #tcpip_socket = false to **tcpip_socket = true**

3. Update the **pg_hba.conf** file to allow TCP/IP connectivity to the database.

   There are examples of different connection options within the file. DocuShare 3 was tested with the following line added to the bottom of the file.

   ```
   host all x.x.x.x 255.255.255.255 trust
   ```

   The x.x.x.x is the IP address of the target machine. This line allows all users on the target machine to connect to PostgreSQL. You can adjust the configuration to map to the standards within your organization.

4. Restart PostgreSQL to create DocuShare tablespace (DocuShare 3 Tablespace on page C–13).

   a. Cd to **/usr/local/pgsql/bin**.
   b. Enter **./pg_ctl start -D /usr/local/pgsql/data**.

This completes the TCP/IP connectivity for PostgreSQL v7.3.

DocuShare 3 Tablespace

During the DocuShare 3 installation (new install), the install wizard creates the tablespace before creating the database tables. If you need to manually create the tablespace before installing DocuShare 3, use the following procedure.

To create tablespace manually:

1. Log into the target system as **postgres**.
2. Enter the command, **createdb –E UNICODE <DocuShare Tablespace Name>**.

This creates the tablespace for DocuShare 3 to use. You can enter any tablespace name, but be sure record the tablespace name. During the DocuShare 3 installation, you are prompted for a tablespace name that will be entered into the DocuShare 3 database schema.

Oracle database

A typical DocuShare 3 and Oracle installation requires that the Oracle database administrator create a DocuShare 3 Oracle user and tablespace before starting the DocuShare 3 installation. The DocuShare 3 install wizard uses the Oracle user and tablespace to create the DocuShare tables, then populate the tables with initial DocuShare data.

NOTE: Oracle 9.2.0 requires server patch set 9.2.0.4.

The DocuShare 3 install wizard can automate these steps if the following pre-install conditions are done:

- You must have an Oracle system manager password. The DocuShare 3 install wizard uses the system manager account to create a new DocuShare/Oracle user account and to designate the new tablespace as the default for the new DocuShare/Oracle account.
- The user account that DocuShare 3 install wizard creates does not already exist.
- The tablespace that DocuShare 3 install wizard creates does not already exist.
- Designated location on the Oracle system that has the required space for the new tablespace files.

If your DocuShare 3 and Oracle pre-installation meet all the conditions, the DocuShare 3 install wizard will:

1. Create a new Oracle user for DocuShare 3 to use.
2. Create a new default tablespace for the Oracle user.
3. Create the DocuShare 3 tables.
4. Populate the DocuShare 3 tables with initial data.

NOTE: If the Oracle database administrator has created the tablespace for DocuShare 3, the install wizard will use this tablespace and perform steps 3 and 4.

These steps are performed in this order; if any step fails, the install wizard aborts the installation.

Tablespace creation script example

If you are using an existing Oracle database for DocuShare or prefer to create and define an Oracle tablespace manually, the following is an example of a typical DocuShare tablespace creation script.

```
CREATE TABLESPACE <name> DATAFILE <file> SIZE <size> DEFAULT STORAGE (INITIAL
500K NEXT 256K MINEXTENTS 1 MAXEXTENTS UNLIMITED PCTINCREASE 0) PERMANENT;
```

Recommended database settings

- Set **cursor_sharing** to **FORCE**—This allows Oracle to recognize and cache similar queries.
- Set **Shared Pool** to have a minimum:
  - 40 Mb
  - 32 Mb Buffer Cache
  - 1024 Kb Large Pool—DocuShare can run with a Java Pool of zero; DocuShare does not use server side Java code or depend on the Java Pool.
- Set **SGA_MAX_SIZE** to the maximum allowed. This must be larger than the sizes of the different pools in the System Global area—such as buffer cache, shared pool, and large pool.
- Set the **SHARED_POOL_RESERVED_SIZE** value to 10% of the SHARED_POOL_SIZE to avoid an Oracle error (ORA-04031). In some default installations, it is set to 1%.
- Set No-Sort option to **enabled**.

D

DocuShare Interact

This appendix provides configuration instructions for DocuShare Interact.

What is DocuShare Interact

DocuShare Interact provides an easy-to-use editor that enables any number of users, called contributors, to collaborate on a project using the web. A user, designated as an author, creates an Interact page for a specific task or project. The author determines the design of the page and controls how much contributors can change on the page. After the author places the page in a DocuShare collection, you and other contributors can add content to the page. As a contributor, you do not need to know HTML code, how to use an HTML editing tool, or anything about the file system in which the page is stored. Using a web browser, you and other contributors can easily make changes to an Interact page.

Interact pages can be created for any task that requires or would benefit from a collaborative effort. For instance, Interact pages can be used to gather agenda items for a meeting, to assign and track action items, to provide a directory of information such as a project's team members or technical papers, and to facilitate co-authoring of a document.

Enabling Interact

DocuShare Interact is a licensed feature of the DocuShare server software. Interact is installed as part of the DocuShare 3.x server software and must be licensed and configured before the feature is available to DocuShare Users.

To enable Interact:

1. DocuShare must be installed.
2. Obtain a license for DocuShare that includes the Interact feature.

Configuring Interact

Once your DocuShare server has been licensed and the Interact feature is enabled, you must configure DocuShare Interact.

1. Log into the DocuShare server as **admin** using the password you supplied during the installation.
   a. On the navigation bar, click **Admin Home**.
   b. From the Administration menu, click **Services and Components**.
   c. Click **DocuShare Interact**. The DocuShare Interact page displays.
2. Click **Apply** to accept all the current property values or highlight a current value to replace with a new value.

NOTE: To replace all the values, select **Restore Default** and click **Reset** to clear all the property values.

Property	Description
Administrator email address	Enter a complete email address, such as JaneSmith@acme.com. Interact displays this address as the designated contact when users have a problem with Interact.
SMTP Gateway address	A valid SMTP Gateway address that Interact can use to send email notifications.
Email domain	The domain name that Interact enters into the **From** field of all outgoing email notifications. For example, If your email address is Interact@acme.com, then enter acme.com in this field.
URL of DocuShare servlet	The base URL that DocuShare can be accessed. For example, http://docushare.acme.com/docushare.

3. Click **Apply** when the propety values are completed. The DocuShare Interact configuration status page displays.
4. Click the **Verify DocuShare Interact** link. The DocuShare Interact verification page displays.
5. Click **Verify**. The DocuShare Interact verification status page displays.

6. Check that DocuShare Interact is properly configured.
    a. Click **Home** on the navigation bar.
    b. On the DocuShare Home page, navigate to and open a collection, such as Initial Top Collection A.
    c. From the Add menu, select **Interact Page**. The Add Interact Page Factory displays.

This completes the DocuShare Interact configuration and verification.

Glossary

This glossary contains definitions for terminology used in DocuShare. Click any letter below to navigate to that section of the glossary.

A B C D E F G H I J K L M

N O P Q R S T U V W X Y Z

A

ACL—Access Control List

A table that tells a computer operating system which access rights each user has to a particular system object, such as a file directory or individual file. Each object has a security attribute that identifies its access control list. The list has an entry for each system user with access privileges. The most common privileges include the ability to read a file (or all the files in a directory), to write to the file or files, and to execute the file (if it is an executable file or program). Microsoft Windows NT/2000, Novell's NetWare, Digital's OpenVMS, and UNIX-based systems are among the operating systems that use access control lists. The list is implemented differently by each operating system.

Amber servlet

Web UI generator that provides backward compatibility for DS 2.x VDF templates. Migrating customizations from a DS 2.x site into the new templates should be straightforward for upgrades.

Administration servlet

Administrator UI generator that uses Java Server Pages (JSP).

API—Application Program Interface

A set of routines, protocols, and tools for building software applications. A good API makes it easier to develop a program by providing all the building blocks. A programmer puts the blocks together.

Applet

A program designed to be executed from within another application. Unlike an application, applets cannot be executed directly from the operating system.

Web browsers, which are often equipped with Java virtual machines, can interpret applets from Web servers. Because applets are small in files size, cross-platform compatible, and highly secure (cannot be used to access users' hard drives), they are ideal for small Internet applications accessible from a browser.

Authentication SPI (Service Provider Interface)

Handles user authentication. Internal Authentication handle local users created and managed in DocuShare. LDAP uses JNDI for users created outside of DocuShare by an external LDAP Directory.

B

BLOB—Binary Large Object

A collection of binary data stored as a single entity in a database management systems (DBMS). BLOBs are used primarily to hold multimedia objects such as images, videos, and sound, though they can also be used to store programs or even fragments of code. Not all DBMSs support BLOBs.

BLOG—Web Log

Short for We**b log**, a blog is a Web page that serves as a publicly-accessible personal journal for an individual. Typically updated daily, blogs often reflect the personality of the author.

BSDDB—Berkley UNIX Distribution Database

Originally from the Berkley UNIX Distribution (BSD) the BSDDB is a simple hash file database used in DocuShare 2.x and FX (Fuji Xerox) versions of Release 3.0. Xerox Corporation supports relational databases using the JDBC interface (Java Database Connection API).

C

CGI—Common Gateway Interface

A specification for transferring information between a World Wide Web server and a CGI program. A CGI program is any program designed to accept and return data that conforms to the CGI specification.

The program could be written in any programming language, including C, Perl, Java, or Visual Basic.

CLI—Commandline Interface

Commonly referred to as the Commandline utilities. Uses the DocuShare Java API.

Compound Documents

DSDocument—a document consists of document properties and one or more versions. They are first class DSObjects with a handle and ACL. This replaces the DocuShare 2.x File Object.

DSVersion—a version consists of version properties and one or more renditions. They are first class DSObjects with a handle and ACL.

Saved HTML pages, MS-Word documents, and Outlook mail message are types of compound documents. They contain hyperlinks and field codes that reference other files or objects. For example, an Outlook email message with file attachments is a .msg file with field codes to the file attachments. These are stored in DocuShare as single compound documents.

ContentElement

A ContentElement consists of ContentElement properties and a reference to a file stored in DocuShare Content Store. ContentElements are not first class DSObjects and do not have a DocuShare Handle or an ACL. ContentElements only exist in a single rendition, but may be shared between renditions in a future release.

Content SPI (Service Provider Interface)

Interface for storing the document contents. File Access Impl provides storage of uploaded files in the file system.

Conversion SPI (Service Provider Interface)

Standardized interface for accessing Conversion Services. These services include:

- HTML Conversion to take editor source files and generate an HTML rendition.
- Text Extraction to generate a text stream from a source file.
- Summarization to create an abstract by extracting the key 6 sentences from a document.
- Thumbnailing to create a reduced picture of standard image files.

Other conversion services can be added (plugged in).

Custom Objects

Custom objects have their own custom properties that are separate from the properties of the parent class.

Allows the site and 3rd parties to define new objects classes such as special Document types or special Collection classes.

New objects can be “cloned” from the existing classes of objects.

D

Database SPI (Service Provider Interface)

Uses JDBC to support relational databases; a true relational schema with properties stored as columns in the database: MSDE, SQL Server 7, or Oracle 9I.

Only metadata is stored in RDMS Oracle: Unlike DocuShare 2.x where an object and everything associated with objects (such as properties) was stored in one BLOB. Property and Handle retrieval occur together for improved performance, not as separate calls to the database.

Document Routing

Basic workflow module to route documents through an approval or review cycle with other DocuShare users. Uses Javascript that must be enabled in the DocuShare server and in the client browser. Also known as Workflow.

Directory SPI (Service Provider Interface)

Provides the interface for User and Group management. Internal Directory handles local users created and managed in DocuShare. LDAP uses JNDI for users created outside of DocuShare by an external LDAP Directory.

Domain Name System (DNS)

DNS short for Domain Name System (or Service), an Internet service that translates domain names into IP addresses. Because domain names are alphabetic, they're easier to remember. The Internet however, is really based on IP addresses. Every time you use a domain name, therefore, a DNS service must translate the name into the corresponding IP address. For example, the domain name, www.example.com, might translate to 198.105.232.4.

E

EJB—Enterprise JavaBeans

A Java API developed by Sun Microsystems that defines a component architecture for multi-tier client/server systems.

F

Glossary Definition

G

Glossary definition

H

hostname

The name assigned to a computer or server.

HTTP—HyperText Transfer Protocol

The underlying protocol used by the World Wide Web. HTTP defines how messages are formatted and transmitted, and what actions Web servers and browsers should take in response to various commands. For example, when you enter a URL in your browser, this actually sends an HTTP command to the Web server directing it to fetch and transmit the requested Web page.

hyperlink

An element in an electronic document that links to another place in the same document or to an entirely different document. Hyperlinks are the most essential ingredient of all hypertext systems, including the World Wide Web.

The text in a link is usually blue and underlined.

I

IP address

An identifier for a computer or device on a TCP/IP network. Networks using the TCP/IP protocol route messages based on the IP (Internet Protocol) address of the destination. The format of an IP address is a

32-bit numeric address written as four numbers separated by periods. Each number can be zero to 255. For example, 1.160.10.240 could be an IP address.

J

Java

Java is a general purpose programming language with a number of features that make the language well suited for use on the World Wide Web. Small Java applications are called Java applets and can be downloaded from a Web server and run on your computer by a Java-compatible Web browser, such as Netscape Navigator or Microsoft Internet Explorer.

JavaScript

A scripting language developed by Netscape to enable Web authors to design interactive sites. Although it shares many of the features and structures of the full Java language, it was developed independently. Javascript can interact with HTML source code, enabling Web authors to spice up their sites with dynamic content. JavaScript is endorsed by a number of software companies and is an open language that anyone can use without purchasing a license. It is supported by recent browsers from Netscape and Microsoft, though Internet Explorer supports only a subset, which Microsoft calls Jscript.

JDBC—Java Database Connectivity

A Java API that enables Java programs to execute SQL statements. This allows Java programs to interact with any SQL-compliant database. Since nearly all relational database management systems (DBMSs) support SQL, and because Java itself runs on most platforms, JDBC makes it possible to write a single database application that can run on different platforms and interact with different DBMSs.

JMS—Java Message Service

An application program interface (API) from Sun Microsystems that supports the formal communication known as messaging between computers in a network. Sun's JMS provides a common interface to standard messaging protocols and also to special messaging services in support of Java programs. Sun advocates the use of the Java Message Service for anyone developing Java applications, which can be run from any major operating system platform.

JNDI—Java Naming and Directory Interface

JNDI is a standard extension to the Java platform, providing Java technology enabled applications with a unified interface to multiple naming and directory services in the enterprise. As part of the Java Enterprise API set, JNDI enables seamless connectivity to heterogeneous enterprise naming and directory services.

JNDI is an API specified in Java that provides naming and directory functionality to applications written in Java. It is designed especially for Java by using Java's object model. Using JNDI, Java applications can store and retrieve named Java objects of any type. In addition, JNDI provides methods for performing standard directory operations, such as associating attributes with objects and searching for objects using their attributes.

JVM—Java Virtual Machine

An abstract computing machine, or virtual machine, JVM is a platform-independent execution environment that converts Java bytecode into machine language and executes it. Most programming languages compile source code directly into machine code that is designed to run on a specific microprocessor architecture or operating system, such as Windows or UNIX. A JVM—a machine within a machine -- mimics a real Java processor, enabling Java bytecode to be executed as actions or operating system calls on any processor regardless of the operating system. For example, establishing a socket connection from a workstation to a remote machine involves an operating system call. Since different operating systems handle sockets in different ways, the JVM translates the programming code so that the two machines that may be on different platforms are able to connect.

JNDI is also defined to be independent of any specific naming or directory service implementation. It enables Java applications to access different, possibly multiple, naming and directory services using a common API. Different naming and directory service providers can be plugged in seamlessly behind this common API. This allows Java applications to take advantage of information in a variety of existing naming and directory services, such as LDAP, NDS, DNS, and NIS (YP), and allows Java applications to coexist with legacy applications and systems.

JSP—Java Server Pages

A server-side technology, Java server pages are an extension to the Java servlet technology that was developed by Sun as an alternative to Microsoft's ASPs (Active Server Pages). JSPs have dynamic scripting capability that works in tandem with HTML code, separating the page logic from the static elements -- the actual design and display of the page. Embedded in the HTML page, the Java source code and its extensions help make the HTML more functional, being used in dynamic database queries, for example. JSPs are not restricted to any specific platform or server.

K

Glossary definition

L

LDAP—Lightweight Directory Access Protocol

A set of protocols for accessing information directories. LDAP is based on the standards contained within the X.500 standard, but is significantly simpler. And unlike X.500, LDAP supports TCP/IP, which is necessary for any type of Internet access. Because it's a simpler version of X.500, LDAP is sometimes called X.500-lite.

LDAP Synchronization Service

An optional component that works with the External LDAP Auth and Directory IMPLs to maintain synchronization between the Users and Groups in an external LDAP directory.

link

In hypertext systems, such as the World Wide Web, a link is a reference to another document. Such links are sometimes called hot links because they take you to other document when you click on them.

The text in a link is usually blue and underlined.

Logging

All services and client applications include logging to provide performance data and record diagnostic messages for reporting and troubleshooting.

Logging levels are:

- Fatal—always enabled. Errors which cause services or the server to be unavailable or dysfunctional.
- Error—fatal and general errors.
- Warning—warnings and error messages.
- Info—errors and informational messages.
- Trace—errors, informational, and troubleshooting data; used to diagnose problems by DocuShare support.
- Debug—all errors, informational, trace and other developer debugging messages.

By default only fatal errors are logged; additional logging can be enabled from the Administrator UI.

The Verity Search Service log list by handles which files failed indexing.

M

metadata

Data about data. Metadata describes how and when and by whom a particular set of data was collected, and how the data is formatted. Metadata is essential for understanding information stored in data warehouses.

MIME—Multipurpose Internet Mail Extensions

A specification for formatting non-ASCII messages so that they can be sent over the Internet. Many email clients now support MIME, which enables them to send and receive graphics, audio, and video files via the Internet mail system. In addition, MIME supports messages in character sets other than ASCII.

There are many predefined MIME types, such as GIF graphics files and PostScript files. It is also possible to define your own MIME types.

Monitor Service

Monitor service is responsible to start and keep DocuShare services running.

MSDE—Microsoft SQL Server Desktop Engine

The Microsoft SQL Server Desktop Engine is a data engine built and based on core SQL Server technology. With support for single- and dual-processor desktop computers, MSDE is a reliable storage engine and query processor for desktop extensions of enterprise applications.

Designed to run in the background, supporting transactional desktop applications, MSDE does not have its own user interface (UI) or tools. Users interact with MSDE through the application in which it is embedded.

N

Notification Queues

NotificationQ is used to queue events for the other services. IndexingQ will queue events for the Indexing/ Search service. SubscriptionQ will queue events for the Subscription service. SummarizationQ will queue events for the Summarization service.

Other services and client will establish additional notification queues.

Notification SPI (Service Provider Interface)

An interface for generalized event notification between services and clients. JMS (Java Message System) is the foundation for the Notification system.

O

OCR

Optical Character Recognition refers to the branch of computer science that involves reading text from paper and translating the images into a form that the computer can manipulate (for example, into ASCII codes). An OCR system enables you to take a book or a magazine article, feed it directly into an electronic computer file, and then edit the file using a word processor.

P

PDF

Portable Document Format. A file format that captures all of the elements of a printed document as an electronic image that you can view, navigate, print, or forward to someone else.

POP3

Post Office Protocol, a protocol used to retrieve email from a mail server. Most email applications (sometimes called an email client) use the POP protocol, although some can use the newer IMAP (Internet Message Access Protocol).

POP3, can be used with or without SMTP.

portal

An input device, such as a Document Centre or an Internet fax device.

PostScript

A page description language (PDL) developed by Adobe Systems. PostScript is primarily a language for printing documents on laser printers, but it can be adapted to produce images on other types of devices.

PostScript is the standard for desktop publishing because it is supported by imagesetters, the very high-resolution printers used by service bureaus to produce camera-ready copy.

Q

Glossary definition

R

Renditions

In DocuShare 3.0, the HTML rendition that is used for viewing many different file types within the web browser.

DSRendition—a rendition consists of rendition properties and one or more ContentElements. Renditions are first class DSObjects that include a handle and ACL.

RMI—Remote Method Invocation

A set of protocols developed by Sun's JavaSoft division that enables Java objects to communicate remotely with other Java objects. RMI is a relatively simple protocol, but unlike more complex protocols such as CORBA and DCOM, it works only with Java objects. CORBA and DCOM are designed to support objects created in any language.

RDBMS—Relational Database Management System

A type of database management system (DBMS) that stores data in the form of related tables. Relational databases are powerful because they require few assumptions about how data is related or how it will be extracted from the database. As a result, the same database can be viewed in many different ways.

S

ScanSoft, Inc.

A developer of digital imaging software that allows users to capture and convert paper documents and photographs into digital files that can be easily edited, organized and shared on PCs and over the Internet.

Search/Indexing SPI (Service Provider Interface)

Provides a common interface for Searching services. R3.0 ships with the Verity Search/Indexing service to manage property and content based indexing and search. Verity Search/Indexing Impl is the core search implementation for Verity. VDK (Verity VDK 4.2) is the primary API to the Verity Search/Indexing libraries.

Servlet

An applet that runs on a server. The term usually refers to a Java applet that runs within a Web server environment. This is analogous to a Java applet that runs within a Web browser environment.

Java servlets are becoming increasingly popular as an alternative to CGI programs. The biggest difference between the two is that a Java applet is persistent. This means that once it is started, it stays in memory and can fulfill multiple requests. In contrast, a CGI program disappears once it has fulfilled a request. The persistence of Java applets makes them faster because there's no wasted time in setting up and tearing down the process.

SMTP

Simple Mail Transfer Protocol, a protocol for sending email messages between servers. Most email systems that send mail over the Internet use SMTP to send messages from one server to another; the messages can then be retrieved with an email client using either POP or IMAP. In addition, SMTP is generally used to send messages from a mail client to a mail server. This is why you need to specify both the POP or IMAP server and the SMTP server when you configure your email application.

SOAP—Simple Object Access Protocol

SOAP provides a simple, lightweight XML-based messaging protocol used to encode the information in Web service request and response messages before sending them over a network. SOAP messages are independent of any operating system or protocol and may be transported using a variety of Internet protocols, including SMTP, MIME, and HTTP.

SPI—Service Provider Interface

The interface to modules within the backend server implementation that are not published to end customers. Only the API is published. The SPI modularity that XC and FX engineers used to build additional module support on the backend (such as additional Conversion Services or a different Search/ Indexing Service)

Subscription Service

Built on JavaMail to interface the external SMTP gateway for email delivery.

T

TCP/IP—Transmission Control Protocol/Internet Protocol

The suite of communications protocols used to connect hosts on the Internet. TCP/IP uses several protocols, the two main ones being TCP and IP.

TextBridge

Optical character recognition (OCR) software used to convert paper documents into digital documents.

TIFF—Tagged Image File Format

One of the most widely supported file formats for storing bit-mapped images on personal computers (both PCs and Macintosh computers). TIFF graphics can be any resolution, and they can be black and white, gray-scaled, or color.

Files in TIFF format often end with a .tif extension.

Tomcat servlet

Tomcat is the official reference implementation of the Java Servlet 2.2 and JavaServer Pages 1.1 technologies. Developed under the Apache license in an open and participatory environment (Open Source).

Tomcat can be used as either a standalone product with its own internal Web server or together with other Web servers, including Apache, Netscape Enterprise Server, Microsoft Internet Information Server (IIS), and Microsoft Personal Web Server. Tomcat requires a Java Runtime Enterprise Environment that conforms to JRE 1.1 or later.

Tomcat is one of several open source collaborations that are collectively known as Jakarta.

U

URL—Uniform Resource Locator

An Internet address, the global address of documents and other resources on the World Wide Web. The first part of the address indicates what protocol to use, and the second part specifies the IP address or the domain name where the resource is located.

V

VDF—View Definition Format

The Xerox DocuShare templating format based on XML used for DocuShare 2.x and 3.0 Web UI customization.

W

Web

A short name for the World Wide Web.

WebDAV—World Wide Web Distributed Authoring and Versioning

The Internet Engineering Task Force (IETF) standard set of platform-independent extensions to HTTP that allows users to collaboratively edit and manage files on remote Web servers. WebDAV features XML properties on metadata; locking, which prevents authors from overwriting each other's changes; namespace manipulation; and remote file management.

WebDAV servlet

Provides native WebDAV support. DocuShare 2.0 was based on emerging WebDAV specifications. DocuShare 3.0 supports the current WebDAV specifications.

Web site

A site (location) on the World Wide Web. Each Web site contains a home page, which is the first document users see when they enter the site. The site might also contain additional documents and files. Each site is owned and managed by an individual, company or organization.

Workflow

Basic workflow module to route documents through an approval or review cycle with other DocuShare users. Uses Javascript that must be enabled in the DocuShare server and in the client browser. Also known as Document Routing.

World Wide Web

A system of Internet servers that support specially formatted documents. The documents are formatted in HTML that supports links to other documents, as well as graphics, audio, and video files. This means you can jump from one document to another simply by clicking on hot spots. Not all Internet servers are part of the World Wide Web.

X

XML/HTTP servlet

DocuShare 3.0 supports the existing XML/HTTP interface. This is the main programmatic interface to existing DocuShare servers and is the protocol on which the Windows Client SDK is built.

Y

Glossary definition

Z

Glossary definition